UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION 3

FINAL DECISION AND RESPONSE TO COMMENTS

Yard 56 (Formerly PEMCO Corporation)
Baltimore, MD

EPA ID NO. MDD003093499

Prepared by

RCRA Corrective Action Section West
Land, Chemicals and Redevelopment Division

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List of Acronyms

bgs	Below ground surface
CAO	Corrective Action Objective
CROMP	Containment Remedy Operations and Maintenance Plan
EPA	Environmental Protection Agency
ERM	Environmental Resources Management
FDRTC	Final Decision and Response to Comments
GTA	Geo-Technology Associates, Inc.
HHRA	Human Health Risk Assessment
IC	Institutional Control
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
PEMCO	Porcelain Enamel Manufacturing Company
PID	Photoionization Detector
RAP	Response Action Plan
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SB	Statement of Basis
SSI	Supplemental Site Investigation
SVOC	Semi-Volatile Organic Compound

TCE	Trichloroethene
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound

Units

µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
mg/kg	milligrams per kilogram
ppm	parts per million

Section 1: Introduction

The United States Environmental Protection Agency (EPA) is issuing this Final Decision and Response to Comments (FDRTC) selecting the Final Remedy for soil and groundwater at Yard 56 located at 5601 Eastern Avenue, Baltimore, Baltimore County, Maryland (hereinafter referred to as the "Facility"). In September 2020, the EPA issued an FDRTC for soils at Lots 27C and 28 and this FDRTC applies to soil and groundwater for the entire Facility. This FDRTC incorporates the Final Remedy selected in the September 2020 FDRTC for Lots 27C and 28. The EPA is issuing this FDRTC under the authority of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. Sections 6901, et seq. (RCRA).

Section 2: Facility Background

The Facility comprises approximately 20.02 acres of land located south of Eastern Avenue and east of South Umbra Street, in the eastern portion of the City of Baltimore, Maryland (**Figure 1 of Attachment A**). The Facility is bordered by Eastern Avenue to the north, Interstate 95 to the south, commercial properties to the east, and residences to the west. In general, land uses in the vicinity of the Facility consist of residential and commercial development, a medical campus, interstate highway corridors, and open fields.

Historically, the Porcelain Enamel Manufacturing Corporation (PEMCO) began operating at the Facility in the early 20th Century. Prior to PEMCO's operation, the Facility property was vacant. PEMCO produced specialty glass (frit), ceramic, enamels, and inorganic pigments until operations ceased in September 2007. The PEMCO manufacturing plant was decommissioned in December 2007. The main manufacturing building housed smelting furnaces, where raw materials were heated until molten and then cooled and broken into small pieces (the frit). Weighing and mixing of raw materials occurred in a color and mixing building, and raw materials were received at the Facility via truck and rail car. Finished product was stored in an on-site warehouse building or at an off-site leased warehouse prior to shipment. A control laboratory monitored production quality, and a separate research laboratory provided technical assistance. Two railroad spurs historically served the Facility but have since been removed.

An on-site wastewater treatment plant operated at the Facility until 2002. This wastewater treatment plant, located southeast of the Color and Mixing building, treated Facility discharge prior to disposal to a settling pond located in the southeast portion of the Facility until the early 1960s. In the mid-1960s, the portion of the Facility containing the settling pond was sold to the Exxon Company for use as part of a large tank farm, at which time the Facility discharge was routed from the wastewater treatment plant to local stormwater

systems. The treatment plant operated under National Pollutant Discharge Elimination System discharge permit 97-DP-0317 until April 1, 2002. After that date, the Facility discharge was routed through the treatment plant's settling basin and then to the municipal sanitary sewer system.

In addition to regulated materials used in the manufacturing and maintenance processes, the Facility historically generated waste in the form of off-specification product, recovered dust, and material settled from process discharge water and surface runoff. Until approximately 1979, off-specification product, smelter refractories, packaging materials, and general facility trash were placed in an approximately six-acre industrial landfill (known as Crystal Hill) on the southern and western portions of the Facility. The landfill was capped with 6 to 8 feet of clay loam and closed in 1979.

The Facility was originally owned and operated by PEMCO Corporation. The PEMCO name was retained throughout the Facility's period of industrial operations. In 1955, the PEMCO plant was sold to Glidden-Durkee Corporation, which became a division of the SCM Corporation (formerly Smith-Corona Company) in 1967. In 1980, the PEMCO Facility was sold to Mobay Chemical Corporation. In 1992, Mobay Chemical Corporation sold the Facility to Miles Inc. In 1995, Miles Inc. sold the facility to Bayer Corporation and in October 1997, the Facility was transferred to the PEMCO Holding Corporation. The Facility ceased all industrial operations and was shut down in 2007. The Facility was then acquired by TRP-MCB 5601 Eastern LLC (TRP-MCB) from PEMCO Holding Corporation in 2014.

The Maryland Department of the Environment (MDE) received an application from TRP-MCB for its Voluntary Cleanup Program (VCP) on September 29, 2014. MDE accepted the Facility into the VCP on August 12, 2015. TRP-MCB then completed a Response Action Plan (RAP) for the Facility, pursuant to the requirements of MDE's VCP.[1] The RAP detailed the remedy elements to address impacted soil, soil vapor, and groundwater contamination within the Facility boundaries in conjunction with the Facility redevelopment. Following a review and receipt of comments from both MDE and EPA and subsequent revisions, a RAP that contemplated the redevelopment of the Facility for residential, retail, and commercial uses was approved by MDE on May 5, 2016.

The owners and each of the Lots that currently comprise the former Facility are as follows:

[1] The MDE-approved RAP is considered by the EPA to have satisfied the RCRA Corrective Action requirements for a Corrective Measures Study (CMS).

Lot	Acreage	Property Owner	Existing/Planned Use	Current Redevelopment Status per RAP
27	4.223	MCB Y56 Mixed Use LLC	Existing Residential apartments & commercial (retail)	Complete
27B	5.473	MCB Y56 Lot 27B LLC	Proposed Commercial	Not yet redeveloped
27C	1.053	MCB Y56 Road LLC	Existing Roadway	Complete
27D	1.091	MCB Y56 Office 2 LLC	Existing Commercial (offices & retail)	Complete
28	7.197	MCB Y56 Retail LLC	Existing Commercial (retail)	Complete
29/49/50	1.602*	MCB 5801 Eastern LLC	Existing Commercial (service station)	Complete

Note: 0.62 acres of this Lot was not historically part of the Facility and, as such, is not subject to RCRA Correction Action requirements.

Each of TRP-MCB, MCB Y56 Retail LLC, MCB Y56 Road LLC, MCB Y56 Office LLC, MCB Y56 Office 2 LLC, MCB Y56 Mixed Use LLC, MCB Y56 Lot 27B LLC, and MCB 5801 Eastern LLC, collectively the prior and current owners of the real property that constitutes the Facility since its acquisition by TRP-MCB in 2014, are collectively referred to herein as "MCB".

The Facility has largely been redeveloped by MCB in two separate phases, respectively known as "Phase I" and "Phase II." In March 2018, TRP-MCB began demolition of existing buildings and construction activities at the Facility. Phase I involved the redevelopment of Lot 27C (the "Road" parcel), Lot 28 (the "Retail" parcel), and Lot 29/49/50 (5801 Eastern- the gas station parcel) and was completed in late 2020.

Phase II of the Facility's redevelopment began in the fall of 2020 involving Lot 27 (the "Mixed Use" parcel) and Lot 27D (the "Medical Office Building" parcel), and was completed in May 2024.

While the redevelopment of Lot 27B has yet to be completed, all grading and related groundwork on the real property has been completed. Any final use and design of any structure and improvements on the Lot shall be consistent with and comply with the requirements of the RAP and this FDRTC. With the pending completion of Phase I of the Facility's redevelopment in 2020, the EPA developed and issued a Final Decision and

Response to Comments in September 2020 solely for Lots 27C and 28 of the Facility. This FDRTC provides a remedy that is consistent with the 2020 FDRTC but is intended to apply to the entire Facility, not simply Lots 27C and 28.

Section 3: Summary of Environmental Investigations

A. Historical Investigations

The Facility was the subject of several historical investigations that were conducted between 1984 and 2004 by the EPA, MDE, Bayer AG, and Millennium Holdings, LLC. These investigations included the collection of two waste samples (one from an on-site dumpster), 41 soil samples, and three ground water samples. In addition, ten surface water samples and 11 sediment samples were collected from on and off-site sample locations. The samples were analyzed for a combination of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, metals, and cyanide. The results from these investigations are consistent with the investigations performed after 2006 as detailed below.

B. 2006/2007 Site Characterization

PEMCO has performed investigations of environmental conditions at the Facility jointly under EPA's Facility Lead Program and Maryland's VCP. The work has been performed in accordance with the Site Characterization Work Plan dated December 6, 2006 (ERM 2006), which was prepared by Environmental Resources Management, Inc. (ERM) on behalf of PEMCO. The EPA approved the Work Plan in January 2007. ERM has also undertaken several focused studies, approved by the EPA and MDE, that augment the Work Plan. The results of the site characterization have been documented and submitted to the EPA and MDE in a January 2011 report titled Site Characterization and Risk Assessment Report (ERM 2011). The Facility characterization included the following: installation of 92 soil borings, installation of 14 monitoring wells, collection of soil and groundwater samples, installation of 32 soil gas probes, five rounds of landfill gas field screening, and a methane extraction and recovery test.

Soil results were compared to the EPA Regional Screening Levels (RSLs). Arsenic was the most prevalent metal detected in soil at levels above its RSL. Arsenic concentrations ranged from non-detect to 74 milligrams per kilogram (mg/kg), the highest concentration found at sample location ESB-27. The only other metals that were detected in at least one soil sample at a concentration above its respective RSL were cobalt and iron. Cobalt was detected in six soil samples and concentrations ranged from 26 mg/kg to 95 mg/kg. These sample locations were below or next to the former manufacturing building at sample locations ESB-8, ESB-27, ESB-30, ESB-31, and ESB-56 or within the landfill at sample location

ESB-45. Iron was detected at 100,000 mg/kg at sample location ESB-31, which is located adjacent to the southern side of the former main manufacturing building. Tetrachloroethene (PCE), trichloroethene (TCE), hexachloroethane, and polycyclic aromatic hydrocarbons (PAHs) exceeded their respective RSLs primarily in the vicinity of the landfill and south of the manufacturing complex.

The soil gas results indicated that a high concentration of VOCs, predominantly PCE and TCE, in soil gas is present in the landfill near monitoring wells EGW-10 and EGW-10D. Several of the soil gas sample points detected methane at concentrations ranging from 26.9 to 99.9 percent by volume.

In December 2006, PEMCO Holding Corporation installed nine shallow monitoring wells, designated EGW-1 through EGW-9, throughout the Facility. These wells were completed at depths between 25 to 35 feet below ground surface (bgs), and groundwater was not encountered in any of these wells. In September 2009, a deep monitoring well, EGW-10, was installed in the landfill to a depth of approximately 85 feet bgs, and groundwater was encountered at 67 feet bgs. In November and December 2009, a deeper monitoring well, EGW-10D, was installed next to EGW-10. EGW-10D was completed at a depth of approximately 131 feet bgs. In January 2010, two monitoring wells were installed. EGW-9D was installed next to EGW-9 and was completed at a depth of approximately 55 feet bgs. EGW-11 was installed at the toe of the landfill at a depth of approximately 30 feet bgs. In February 2013, monitoring well EGW-12 was installed at the western Facility property boundary. EGW-12 was installed to a depth of 61 feet bgs and ground water was encountered at 49 feet bgs. The groundwater samples from EGW-10 contained PCE above its Maximum Contaminant Level (MCL) of 5 micrograms per liter (µg/L) (970 µg/L), TCE above its MCL of 5 µg/L (270 µg/L), cis-1,2-dichloroethene above its MCL of 70 µg/L (570 µg/L), and carbon tetrachloride above its MCL of 5 µg/L (21 µg/L). Chloroform was also detected at EGW-10 at concentrations of less than 10 µg/L but above its tap water RSL of 0.190 µg/L. Initial groundwater samples from EGW-10D, EGW-9D, and EGW-11 indicated that there were no exceedances of the MCLs for any VOCs. Carbon tetrachloride (7.7 µg/L) and PCE (12 µg/L) exceeded their MCLs (5 µg/L for both) at EGW-12. Monitoring well EGW-12 is located west of EGW-10 and concentrations were significantly lower in EGW-12 than EGW-10.

C. 2014 Supplemental Characterization

A supplemental site characterization was conducted in 2014 by Geo-Technology Associates, Inc. (GTA) on behalf of TRP-MCB. Activities included soil, groundwater, soil vapor, and methane sampling and field screening. Forty-five borings (GTA-SB-1 through GTA-SB-45) were performed for soil sampling and analysis, and 16 borings (GTA-SV-1 through GTA-SV-16) were advanced for the installation of soil vapor probes. Twenty-two borings were performed to evaluate the depth of fill material in the landfill or for installation of methane

monitoring probes. Monitoring wells GTA-MW-1 through GTA-MW- 5 were also installed as part of this site characterization.

VOCs did not exceed the EPA RSLs in any of the soil samples analyzed. For SVOCs, benzo(a)anthracene (RSL of 1.1 mg/kg), benzo(a)pyrene (RSL of 0.11 mg/kg), benzo(b)fluoranthene (RSL of 1.1 mg/kg), dibenz(a,h)anthracene (RSL of 0.11 mg/kg), and indeno(1,2,3-cd)pyrene (RSL of 1.1 mg/kg) exceeded their respective RSLs in both surface and subsurface soil. In surface soil, concentrations ranged from non-detect to 2.6 mg/kg for benzo(a)anthracene, non-detect to 2.2 mg/kg for benzo(a)pyrene, non-detect to 2.4 mg/kg for benzo(b)fluoranthene, non-detect to 0.44 mg/kg for dibenz(a,h)anthracene, and non-detect to 1.2 mg/kg for indeno(1,2,3-cd)pyrene. In subsurface soil, concentrations ranged from non-detect to 5.8 mg/kg for benzo(a)anthracene, non-detect to 5.0 mg/kg for benzo(a)pyrene, non-detect to 4.4 mg/kg for benzo(b)fluoranthene, non-detect to 1.1 mg/kg for dibenz(a,h)anthracene, and non-detect to 2.6 mg/kg for indeno(1,2,3-cd)pyrene. The following metals exceeded their respective RSLs in surface and subsurface soil:

- Antimony (RSL of 31 mg/kg): concentrations ranging from non-detect to 330 mg/kg
- Arsenic (RSL of 0.68 mg/kg): concentrations ranging from non-detect to 27 mg/kg
- Cadmium (RSL of 71 mg/kg): concentrations ranging from non-detect to 2,300 mg/kg
- Cobalt (RSL of 23 mg/kg): concentrations ranging from non-detect to 190 mg/kg
- Iron (RSL of 55,000 mg/kg): concentrations ranging from 6,700 to 110,000 mg/kg
- Lead (RSL of 400 mg/kg) with concentrations ranging from 3.2 to 22,000 mg/kg.

Groundwater samples were collected from newly installed monitoring wells GTA-MW-1 through GTA-MW- 5 as well as monitoring wells EGW-9D, EGW-10, and EGW-12. For SVOCs:

- Hexachloroethane exceeded the RSL of 0.33 µg/L in monitoring wells GTA-MW-3, GTA-MW-5, and EGW-10 with concentrations ranging from 11 to 670 µg/L (GTA-MW-5).
- Naphthalene exceeded the RSL of 0.17 µg/L in GTA-MW-5 (29 µg/L).
- Bis(2-ethylhexyl)phthalate exceeded the MCL of 6 µg/L in GTA-MW-4 (9.5 µg/L).

For VOCs:

- 1,1,2,2-tetrachloroethane exceeded the RSL of 0.076 µg/L in GTA-MW-5 (1.5 µg/L) and EGW-10 (1.4 µg/L).
- 1,1-Dichloroethene exceeded the MCL of 7 µg/L in GTA-MW-5 (14 µg/L) and EGW-10 (12 µg/L).
- Carbon tetrachloride exceeded the MCL of 5 µg/L in GTA-MW-2 through GTA-MW-5, EGW-10, and EGW-12 with concentrations ranging from 10 to 290 µg/L.
- Chloroform exceeded the MCL of 80 µg/L in GTA-MW-2 (190 µg/L).

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- PCE exceeded the MCL of 5 µg/L in GTA-MW-1 through GTA-MW-5, EGW-10, and EGW-12 with concentrations ranging from 14 to 28,000 µg/L (GTA-MW-5).
- TCE exceeded the MCL of 5 µg/L in GTA-MW-2, GTA-MW-3, GTA-MW-5, and EGW-10 with concentrations ranging from 5.7 to 3,400 µg/L (GTA-MW-5).
- Vinyl chloride exceeded the MCL of 2 µg/L in GTA-MW-5 (38 µg/L) and EGW-10 (4.7 µg/L).
- cis-1,2-Dichloroethene exceeded the MCL of 70 µg/L in GTA-MW-5 (12,000 µg/L) and EGW-10 (11,000 µg/L).
- trans-1,2-Dichloroethene exceeded the MCL of 100 µg/L in GTA-MW-5 (310 µg/L) and EGW-10 (290 µg/L).

For dissolved metals:

- Antimony exceeded the MCL of 6 µg/L in GTA-MW-5 (17 µg/L).
- Cobalt exceeded the RSL of 6 µg/L in GTA-MW-1 through GTA-MW-5 with concentrations ranging from 20 to 65 µg/L.
- Iron exceeded the RSL of 14,000 µg/L in GTA-MW-4 (15,000 µg/L) and GTA-MW-5 (18,000 µg/L).
- Lead exceeded the MCL of 15 µg/L in GTA-MW-5 (1,400 µg/L).
- Manganese exceeded the RSL of 430 µg/L in GTA-MW-1 (1,400 µg/L) and GTA-MW-2 (540 µg/L).
- Sodium exceeded the MCL of 1,000 µg/L in all monitoring wells with concentrations ranging from 21,000 to 670,000 µg/L.
- Total chromium exceeded the MCL of 100 µg/L in GTA-MW-4 (320 µg/L).

VOCs (carbon tetrachloride, chloroform, PCE, 1,1,2-trichloroethane, TCE, and vinyl chloride) were detected in soil vapor beneath the Facility above their MDE Tier 1 Values. Carbon tetrachloride (MDE Tier 1 of 94 micrograms per cubic meter [µg/m^3]) was found at concentrations ranging from non-detect to 7,600 µg/m^3. Chloroform (MDE Tier 1 of 24 µg/m^3) was found at concentrations ranging from non-detect to 2,300 µg/m^3. PCE (MDE Tier 1 of 840 µg/m^3) was found at concentrations ranging from non-detect to 380,000 µg/m^3. TCE (MDE Tier 1 of 42 µg/m^3) was found at concentrations ranging from non-detect to 23,000 µg/m^3. 1,1,2-Trichloroethane (MDE Tier 1 of 4.2 µg/m^3) was found at concentrations ranging from non-detect to 6.5 µg/m^3. Methane was detected in the central portion of the former landfill known as Crystal Hill as high as 61.7% by volume.

D. Supplemental Investigations

As part of the RAP, several supplemental site investigations were performed at the Facility, as summarized below.

In July 2017, GTA performed a Supplemental Site Investigation (SSI) of the suspect polychlorinated biphenyl (PCB) underground storage tank (UST) area on behalf of TRP-MCB. This SSI was performed on the northeastern portion of the Facility, in the vicinity of the former control laboratory building. A geophysical evaluation in the asphalt and concrete-paved areas located in the vicinity of the control laboratory building did not identify anomalies that were considered consistent with an UST. Ten soil borings were installed and sample results did not identify PCBs.

The SSI also further evaluated lead and cadmium soil impacts previously identified at three locations (GTA-SB-11, GTA-SB-26, and GTA-SB-41) on the central and southeastern portions of the Facility. Lead was detected in each of the soil samples obtained but was below the RSL. Cadmium was not detected above the laboratory reporting limit.

In March 2018, TRP-MCB installed six additional soil vapor points to further evaluate impacts surrounding soil vapor sampling location GTA-SV-5. PCE and TCE were detected above the screening levels, with PCE concentrations ranging from 3.4 to 3,600 µg/m^3 and TCE concentrations ranging from non-detect to 150 µg/m^3. Impacts are primarily located beneath the location of the former Warehouse and Main Manufacturing Building.

TRP-MCB performed additional groundwater gauging, sampling, and analysis in March 2018, prior to building demolition and groundwater monitoring well abandonment which had been approved by the EPA and MDE. Five monitoring wells (GTA-MW-1 through GTA-MW-5) installed in 2014 and three wells, previously installed between 2006 and 2009 (EGW-9D, EGW-10, and EGW-12), were assessed and determined to be intact. The eight wells, except for EGW-9D, which was damaged and not sampled in 2018, contained exceedances of the MCLs and/or Tapwater RSLs for VOCs, SVOCs, and TAL metals. 1,1-Dichloroethene was detected above the MCL of 7 µg/L in GTA-MW-5 (10 µg/L) and EGW-10 (13 µg/L); carbon tetrachloride exceeded the MCL of 5 µg/L in each well except GTA-MW-1 with concentrations ranging from 5.4 to 410 µg/L; chloroform exceeded the MCL of 80 µg/L in GTA-MW-2 (380) ; PCE exceeded the MCL in GTA-MW-2 (720 µg/L), GTA-MW-3 (12 µg/L), GTA-MW-5 (2,800 µg/L), EGW-10 (5,100 µg/L), and EGW-12 (7.8 µg/L); TCE exceeded the MCL in GTA-MW-2 (170 µg/L), GTA-MW-5 (1,500 µg/L), and EGW-10 (3,200 µg/L); cis-1,2-dichloroethene exceeded the MCL of 70 µg/L in GTA-MW-5 (4,700 µg/L) and EGW-10 (13,000 µg/L); and trans-1,2-dichloroethene exceeded the MCL of 100 µg/L in GTA-MW-5 (180 µg/L) and EGW-10 (310 µg/L). Dissolved cobalt, sodium, and lead were also detected above the MCLs and/or Tapwater RSLs. The monitoring wells installed during the Phase I investigation in 2006 were either abandoned prior to 2014 or were installed too shallow and did not yield any groundwater.

In November 2019, GTA initiated an additional methane evaluation on behalf of MCB. Twenty-one methane probes were installed within and surrounding the landfill. Five rounds of methane screening were conducted between November 15, 2019 and October 8, 2021.

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The areas where methane was detected corresponded to areas within the landfill, with the areas of highest methane concentrations (GTA-CMM1 and GT-CMM2) corresponding to an area of high methane concentrations observed during prior evaluations.

E. Natural Attenuation

Natural attenuation entails a variety of physical, chemical and/or biological processes that reduce the mass, toxicity, mobility, volume, or concentration of constituents of concern. These processes are classified as degradation (biological or chemical), sorption (chemical) and dispersion, diffusion, dilution, and volatilization (physical).

Although temporal ground water sampling data is limited to multiple sampling events in fall 2009, winter 2010, February 2013, January 2015, and March 2018, it is reasonable to interpret the existing ground water data as indicative of attenuating conditions. The highest detections are of PCE, TCE, and cis-1,2-dichloroethene at the source area in wells GTA-MW-5 and EGW-10. PCE, TCE, and cis-1,2-dichloroethene concentrations appear to be decreasing in monitoring well GTA-MW-5. In addition, detections of cis-1,2-dichloroethene at GTA-MW-1 through GTA-MW-5 and EGW-10 and detections of vinyl chloride at GTA-MW-5 and EGW-10, along with PCE and TCE, is indicative of natural biodegradation of PCE. cis-1,2-Dichloroethene and vinyl chloride are produced through the natural reductive dechlorination of PCE and TCE.

F. Interim Measures

Soil sampling conducted in 2018 by GTA on behalf of MCB identified PCB impacts in two areas: (1) an enclosed transformer room within the northeastern portion of the former warehouse building; and (2) a portion of a concrete floor slab, adjacent to a former transformer pad, in the west-central portion of the color mixing building. The transformers were removed sometime in the past, but it is not known when. In November 2018, PCB-contaminated soil and concrete were delineated in these areas and placed in roll-off dumpsters for off-site disposal. Approximately 164 tons of material were disposed of at an off-site disposal facility.

In 2018, TRP-MCB identified and removed three 8,000-gallon diesel USTs (identified as UST Nos. 2-4), two 500-gallon heating oil USTs (identified as UST Nos. 5 and 6), and a 550-gallon heating oil UST (identified as UST No. 8) and associated petroleum-impacted soils were identified and removed. It should be noted that UST Nos. 1 and 7 had been previously removed from the Facility. A total of 437.04 tons of petroleum impacted soil was removed during all excavation activities described above.

During redevelopment activities throughout 2018 to 2023, petroleum-impacts were discovered in certain areas of the Facility. Between December 2018 and March 2019, two areas of petroleum-impacted soil were discovered in sewer and storm drain utility runs located on the southeastern and central portions of the Facility. The petroleum-impacted

soils in the southeastern portion of the Facility were observed approximately 1-foot bgs and consisted of gray clays and silts that exhibited a petroleum odor. Elevated Photoionization Detector (PID) readings were not observed. Stained soil and petroleum odors were not observed below 5 feet bgs, where native clays were encountered. The approximate area of excavated petroleum-impacted soil that was removed was irregularly shaped, but approximately 51 feet long, 18 feet wide, and 5 feet deep. The petroleum-impacted soil was staged on and covered with plastic adjacent to the excavation prior to future off-site disposal. No liquids were encountered in the excavation.

In April 2019, a second area of petroleum-impacted soil was discovered in a water line utility run located on the central portion of the Facility. The petroleum-impacted soil was observed approximately 1-foot bgs. Observed PID readings ranged between 50 and 100 parts per million (ppm). Stained soil and petroleum odors were not observed below 3 feet bgs, where native clays were encountered. The area of excavated petroleum-impacted soil that was removed measured approximately 20 feet long, 10 feet wide, and 3 feet deep. The petroleum-impacted soil was staged on and covered with plastic adjacent to the excavation prior to future off-site disposal. No liquids were encountered in the excavation.

In May and June 2019, a third area of petroleum-impacted materials were encountered during footing excavations. An approximately 75-foot section of petroleum-impacted soil was discovered in May 2019. In June 2019, two approximately 25-foot sections of petroleum-impacted soil were discovered north and south of the original 75-foot section. This material was found approximately 3 feet bgs and consisted of an approximately 1.5-foot layer of stone, brick, and concrete mixed with soil (petroleum-impacted material). Clays were observed above and below this material, and the clays did not display indications of staining or unusual odors. The petroleum-impacted material exhibited petroleum odors, and PID readings were between 30-60 ppm. No liquids were observed in the excavation. Petroleum-impacted soils were not observed west of the excavation during prior utility installation activities, nor were they observed further east during the installation of interior column footings.

In December 2023, a fourth area of petroleum-impacted soil was identified along the western property boundary, in a former parking area adjacently east of the Umbra Street Alley. The approximate area of excavated petroleum-impacted soil was 15-foot wide, by 450-foot long, and 1 foot deep. The petroleum-impacted soil was directly loaded for off-site disposal. In addition, landfill debris that exhibited an unusual odor was encountered within an approximate 85-foot-long section of sewer utility installation, generally within the central portion of the landfill. This area generally corresponds to a VOC-impacted area identified during prior evaluations. The odoriferous materials were generally located beneath approximately two feet of clay material and consisted of a gray granular material with some clay mixed with paper and plastic debris. This material was encountered to a

depth of approximately 11.5 feet below existing grades, where more granular soil and clays mixed with construction debris were encountered. The utility trench generally measured 5 feet wide, with the upper portions sloped outward for safety. A total of 717.31 tons of VOC- and lead-impacted soil was removed during the excavation activities described above.

Footnotes for the tables are provided in **Table 1 of Attachment A**. Soil borings locations are shown on **Figures 2A** and **2B of Attachment A** and results are provided in **Tables 2** through **4 of Attachment A**. Monitoring well locations are shown on **Figures 3A** and **3B of Attachment A** and results are provided in **Tables 5** through **7 of Attachment A**. Soil vapor sample locations are shown on **Figures 4A** and **4B of Attachment A** and results are provided in **Table 8 of Attachment A**.

Section 4: Human Health Risk Assessment

A Human Health Risk Assessment (HHRA) was performed under the assumption the entire Facility would be redeveloped for non-residential use. The results of the HHRA indicate that there is no unacceptable risk to current or future adolescents or adult trespassers or visitors at any of the undeveloped areas of the Facility. Further, there was no unacceptable risk identified for current or future off-site residents or industrial workers. The HHRA identified a potential for unacceptable risk to the following human health receptors under current or future industrial use conditions of the Facility:

- Presuming future redevelopment of the Facility property, exposure of future building occupants to soil gas via vapor intrusion could result in unacceptable risk to human health.
- Exposure to impacted soils within the approximate extent of VOC impacts (identified on **Figure 2A of Attachment A**) could result in an elevated non-carcinogenic hazard and carcinogenic risk to the construction/utility worker if unprotected exposure were to occur.
- Exposure to soil vapors in a trench within the approximate extent of VOC impacts (identified on **Figure 2A of Attachment A**) could result in an elevated carcinogenic risk to the construction/utility worker.
- Groundwater beneath the Facility contains VOCs and metals at concentrations above the EPA tapwater RSLs and MCLs, which could pose an unacceptable risk to human health receptors at the Facility if used for potable or non-potable purposes. Currently, there are no groundwater supply wells on the Facility.
- Exposure to deep on-site groundwater for non-potable purposes could result in an elevated carcinogenic and noncarcinogenic risk for industrial workers.

The HHRA also concluded that if the Facility is to be redeveloped either as industrial or residential, controls would be required to eliminate the unacceptable risks identified above. The final remedy selected in this FDRTC includes these controls. As discussed in the *Migration of Contaminated Groundwater Under Control Environmental Indicator* for the Facility, analytical results from EGW-12 indicate low levels of VOCs are present in groundwater. The concentrations of carbon tetrachloride (6.8 µg/L) and PCE (7.8 µg/L) detected in EGW-12 are significantly lower than at the center of the property (at EGW-10) and are likely attributable to mixing of waters beneath the landfill where flow from the west and east converge at a former stream trace. The risk to off-site receptors west of EGW-12 due to vapor intrusion has been assessed based on the prior ESG-30 and ESG-31 soil gas results and found to be negligible. ESG-30 and ESG-31 are located near EGW-31 and benzene in ESG-31 (696J[2] µg/m^3) was the only constituent that exceeded the MDE Tier 1 value of 72 µg/m^3. VOCs were also non-detect at downgradient monitoring well EGW-9D, except for PCE at 1.1 µg/L, which is below the MCL of 5 µg/L. These data, along with the soil gas results collected as part of the site characterization indicate that VOCs are not migrating towards the property boundary at levels of concern. With the exception of a single detection, methane has not been detected in any monitoring point located along the perimeter of the Facility.

Section 5: Corrective Action Objectives

The EPA's Corrective Action Objectives (CAOs) are as follows:

1. Soil

The EPA has determined that contaminants currently remain in Facility soils above acceptable risk levels protective of human health and the environment for residential use. Therefore, the EPA's proposed Corrective Action Objective for Facility soils is to control exposure to the hazardous constituents remaining in surface soils by requiring compliance with and maintenance of engineering controls and land use restrictions.

2. Groundwater

The EPA expects final remedies to return usable groundwater to its maximum beneficial use, where practicable, within a timeframe that is reasonable. For projects where aquifers are either currently used for water supply or have the potential to be used for water supply, EPA will use the National Primary Drinking Water Standard MCLs promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of

[2] J is a laboratory qualifier indicating the analyte concentration is estimated.

the Safe Drinking Water Act and codified at 40 C.F.R. Part 141. The EPA's Corrective Action Objectives for Facility groundwater are 1) to restore the groundwater to drinking water standards, otherwise known as MCLs, or to the relevant RSL for tap water for contaminants that do not have an MCL and, 2) until such time as drinking water standards are restored, to control exposure to the hazardous constituents remaining in the groundwater by requiring the continued implementation of the groundwater monitoring program and compliance with and maintenance of groundwater use restrictions.

3. Soil Vapor

The EPA's CAO for soil vapor at the Facility is to control human exposure to contaminated subsurface vapor in buildings/structures so that indoor air quality within any such buildings/structures is protective of human health for current and anticipated future uses.

Section 6: Public Comment Period

On June 13, 2024, the EPA proposed a remedy consisting of the implementation of engineering controls; land and groundwater use restrictions implemented by an enforceable document such as an order and/or an Environmental Covenant to control exposure to contaminated soil and groundwater; and long-term groundwater monitoring. Consistent with public participation provisions under the RCRA, the EPA requested comments from the public on the proposed remedy as described in the Statement of Basis (SB). The commencement of a thirty (30)-day public comment period was announced in the Baltimore Sun newspaper and on the EPA Region 3 website. The public comment period ended on July 13, 2024.

During the public comment period, the EPA received comments from MCB, that provided clarifying information on the Facility background, ownership, and relationship to the EPA's September 2020 FDRTC for Lots 27C and 28 (Attachment B) which has been included in the FDRTC. The comments and the EPA's responses are provided in Attachment C.

The EPA has determined that the public comments do not substantially change, or cause reason to change, the proposed remedy in the SB and therefore, the Final Remedy is unchanged from the proposed remedy. The SB is incorporated by reference into this FDRTC as Attachment A.

Section 7: Final Remedy

The EPA has determined that corrective measures are necessary at the Facility to address residual contamination of soil, groundwater, and soil vapor. The EPA's Final Remedy for the Facility consists of the following components:

1. Soil: The EPA's final remedy for Facility soil is to maintain the existing cover system on the Facility (hardscaped or landscaped cap with marker fabric above the contaminated soil) that controls, minimizes, or eliminates post remedial action migration of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, to the extent necessary to protect human health and the environment. The remaining area (Lot 27B) of the Facility to be capped (**Figure 5 of Attachment A**) includes a small portion undergoing redevelopment (the rest of the Facility has already been capped).
2. Groundwater: The EPA's final remedy for Facility groundwater consists of monitored natural attenuation until MCLs or, if no MCLs exist, the RSLs for tap water are met. Monitoring wells shall be installed pursuant to an EPA-approved Work Plan and long-term groundwater monitoring is required. Additionally, EPA's Final Remedy for groundwater also includes continued compliance with the Environmental Covenant already recorded in land records for each of Lots 27, 27C, 27D, 28 and 29/49/50 to prevent exposure to contaminants while levels remain above MCLs or RSLs, as applicable.
3. Soil Vapor:
    a. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.
    b. The integrity of vapor intrusion control systems installed in existing buildings shall be maintained.
    c. All vapor intrusion control systems shall be inspected, maintained, and repaired as needed.
    d. Atmospheric pressure differentials and other factors such as soil permeability, moisture content, etc., may cause accumulation of methane

beneath hardscaped paved areas, and shall be addressed by installation of vapor vents located at light pole locations within the parking lots.

4. The EPA is requiring implementation and/or continued compliance with the following land and groundwater use restrictions:

    a. Groundwater at the Facility shall not be used for any purpose other than the operation, maintenance, and monitoring activities currently being conducted at the Facility and activities required by the EPA and MDE, unless it is demonstrated to the EPA and MDE that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy, and the current Facility owner obtains prior written approval from the EPA and MDE for such use.

    b. No new wells shall be installed on the Facility unless it is demonstrated to the EPA and MDE that such wells are necessary to implement the final remedy for the Facility, and the current owner obtains prior written approval from the EPA and MDE to install such wells.

    c. The integrity of vapor intrusion control systems installed in existing buildings shall be maintained.

    d. All vapor intrusion control systems shall be inspected, maintained, and repaired as needed.

    e. Compliance with the EPA and MDE-approved Containment Remedy Operations and Maintenance Plan (CROMP) and Health and Safety Plan. The CROMP will require the current Facility owner to maintain the integrity of the vapor intrusion control systems and all caps and covers on the Facility by conducting regular periodic inspections (no less frequently than once per year), making timely repairs if needed, and maintaining a record of such inspection and maintenance. The CROMP will also establish the documentation, reporting, and notification methods that will be used to implement, monitor compliance, and ensure the CROMP remains in place and effective.

    f. All earthmoving activities on the Facility, including excavation, grading, and/or utility construction, shall be conducted in compliance with an EPA and MDE-approved CROMP to ensure that the activity will not pose a threat to human health and the environment or adversely affect or interfere with the covered areas.

    g. On an annual basis and whenever requested by the EPA or MDE, the current Facility owner shall submit to MDE and the EPA a written certification stating

whether the owner is maintaining and complying with all groundwater and land use restrictions.

h. The Facility shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the final remedy.

The land and groundwater use restrictions necessary to prevent human exposure to contaminants at the Facility will be implemented through enforceable Institutional Controls (ICs) such as an order and/or an Environmental Covenant pursuant to the Maryland Uniform Environmental Covenants Act, §§ 1-80 I through 1-815 of the Environment Article, Annotated Code of Maryland to be recorded with the land records of the Circuit Court for Baltimore City for the Facility property. If the EPA determines that additional monitoring activities, institutional controls, or other corrective actions are necessary to protect human health or the environment, the EPA has the authority to require and enforce such additional corrective actions through an enforceable mechanism which may include an order or Environmental Covenant, provided any necessary public participation requirements are met. If any individual with an interest in the Facility property believes that information shows that any use restrictions proposed and later selected by the EPA are no longer necessary to protect public health and the environment, the individual may submit such information to the EPA for consideration. The EPA can change any such restriction if it determines it is no longer necessary, after any required public comment period.

Section 8: Financial Assurance

MCB will be required to demonstrate and maintain financial assurance for completion of the remedy pursuant to the standards contained in Federal regulations 40 C.F.R. § 264.145 and 40 CFR § 264.143. The amount of financial assurance will be based on the estimated construction and long-term monitoring and maintenance costs for the final remedy that MCB shall provide to the EPA for evaluation and approval.

Section 9: Declaration

Based on the Administrative Record compiled for the Corrective Action at the Facility, the EPA has determined that the Final Remedy selected in this Final Decision and Response to Comments is protective of human health and the environment.

DAVID CAMPBELL

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Date: 2024.09.24 09:48:27 -04'00'

_____ Date: _____

David Campbell, Director
Land, Chemicals, and Redevelopment Division
US EPA, Region 3

Attachment A

UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION 3

STATEMENT OF BASIS

Yard 56 (Formerly PEMCO Corporation)
Baltimore, MD

EPA ID NO. MDD003093499

Prepared by

RCRA Corrective Action Section West
Land, Chemicals and Redevelopment Division

May 2024

Table of Contents

List of Acronyms

amsl	Above mean sea level
AR	Administrative Record
bgs	Below ground surface
CAO	Corrective Action Objective
EC	Environmental Covenant
EJ	Environmental Justice
EPA	Environmental Protection Agency
ERM	Environmental Resources Management
GTA	Geo-Technology Associates, Inc.
HHRA	Human Health Risk Assessment
HSWA	Hazardous and Solid Waste Amendments
IC	Institutional Control
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
O&M	Operations and Maintenance
PAH	Polycyclic Aromatic Hydrocarbon

PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
PEMCO	Porcelain Enamel Manufacturing Company
PID	Photoionization Detector
RAP	Response Action Plan
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SB	Statement of Basis
SSI	Supplemental Site Investigation
SVOC	Semi-Volatile Organic Compound
TCE	Trichloroethene
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for Yard 56 located at 5601 Eastern Avenue, Baltimore, Baltimore County, Maryland (Facility).

The EPA's proposed remedy in this SB consists of the implementation of engineering controls, monitored natural attenuation of groundwater, land and groundwater use restrictions implemented through enforceable Institutional Controls such as an order and/or an Environmental Covenant to control exposure to contaminated soil and groundwater, and long-term groundwater monitoring. This SB highlights key information relied upon by the EPA in proposing its remedy.

The Facility is subject to the EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. The Corrective Action Program requires that owners and/or operators of facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from their property. Environmental Justice (EJ) and Climate Adaptation information were considered during the RCRA Corrective Action decision-making process; this Facility is not considered a concern for EJ or Climate Adaptation.

The EPA is providing a thirty (30) day public comment period on the EPA's proposed remedy described in this SB. The EPA will evaluate comments received after the public comment period has ended and may modify its proposed remedy based on such comments. If the final remedy is substantially unchanged from the one proposed, the EPA will issue a Final Decision and inform all persons who submitted written comments or requested notice of the EPA's final determination. If the final remedy is significantly different from the one proposed, the EPA will issue a public notice explaining the new remedy and will reopen the comment period. The EPA will respond in writing to all relevant comments received during the comment period.

Information on the Corrective Action program and the Government Performance and Results Act Environmental Indicator Determinations for the Facility can be found by navigating to https://www.epa.gov/hwcorrectiveactioncleanups/hazardous-waste-cleanup-yard-56-formerly-pemco-corporation-baltimore.

The EPA has compiled an Administrative Record (AR) containing all documents, including data and quality assurance information, upon which EPA's proposed remedy is based. See Section 10, Public Participation, below, for information on how you may review the AR.

Section 2: Facility Background

The Facility comprises approximately 19.97 acres of land located south of Eastern Avenue and east of South Umbra Street, in the eastern portion of the City of Baltimore, Maryland (**Figure 1**). The Facility is bordered by Eastern Avenue to the north, Interstate 95 to the south, commercial properties to the east, and residences to the west. In general, land uses in the vicinity of the Facility consist of residential and commercial development, a medical campus, and open fields.

Historically, the Porcelain Enamel Manufacturing Corporation (PEMCO) began operating at the Facility in the early 20th Century. Prior to PEMCO's operation, the Facility property was vacant. PEMCO produced specialty glass (frit), ceramic, enamels, and inorganic pigments until operations ceased in September 2007. The PEMCO manufacturing plant was decommissioned in December 2007. The main manufacturing building housed smelting furnaces, where raw materials were heated until molten and then cooled and broken into small pieces (the frit). Weighing and mixing of raw materials occurred in a color and mixing building, and raw materials were received at the Facility via truck and rail car. Finished product was stored in an on-site warehouse building or at an off-site leased warehouse prior to shipment. A control laboratory monitored production quality, and a separate research laboratory provided technical assistance. Two railroad spurs historically served the Facility but have since been removed.

An on-site wastewater treatment plant operated at the Facility until 2002. This wastewater treatment plant, located southeast of the Color and Mixing building, treated Facility discharge prior to disposal to a settling pond located in the southeast portion of the Facility until the early 1960s. In the mid-1960s, the portion of the Facility containing the settling pond was sold to the Exxon Company for use as part of a large tank farm, at which time the Facility discharge was routed from the wastewater treatment plant to local stormwater systems. The treatment plant operated under National Pollutant Discharge Elimination System discharge permit 97-DP-0317 until April 1, 2002. After that date, the Facility discharge was routed through the treatment plant's settling basin and then to the municipal sanitary sewer system.

In addition to regulated materials used in the manufacturing and maintenance processes, the Facility historically generated waste in the form of off-specification product, recovered dust, and material settled from process discharge water and surface runoff. Until approximately 1979, off-specification product, smelter refractories, packaging materials, and general facility trash were placed in an approximately six-acre industrial landfill (known as Crystal Hill) on the southern and western portions of the Facility. The landfill was capped with 6 to 8 feet of clay loam and closed in 1979.

Statement of Basis

The Facility was originally owned and operated by PEMCO Corporation. The PEMCO name has been retained throughout the Facility's operation. In 1955, the PEMCO plant was sold to Glidden-Durkee Corporation, which became a division of the SCM Corporation (formerly Smith-Corona Company) in 1967. In 1980, the PEMCO Facility was sold to Mobay Chemical Corporation. In 1992, Mobay Chemical Corporation sold the Facility to Miles Inc. In 1995, Miles Inc. sold the facility to Bayer Corporation and in October 1997, the Facility was transferred to the PEMCO Holding Corporation. The Facility was acquired by current owner TRP-MCB 5601 Eastern, LLC from PEMCO Holding Corporation in 2014. The Maryland Department of the Environment (MDE) received an application from TRP-MCB 5601 Eastern LLC for its Voluntary Cleanup Program (VCP) on September 29, 2014. MDE accepted the Facility into the VCP on August 12, 2015. The Facility has recently undergone redevelopment consistent with the remedy elements described in the MDE-approved Response Action Plan (RAP). The RAP detailed the remedy elements to address impacted soil, soil vapor, and groundwater contamination within the Facility boundaries in conjunction with the Facility redevelopment. Portions of the Facility have been redeveloped into a residential apartment building, retail spaces, and office spaces.

In March 2018, TRP-MCB 5601 Eastern, LLC began demolition of existing buildings and construction activities at the Facility. Construction and capping activities (including placement of buildings, hardscaped areas, landscaped areas, and vapor intrusion controls in buildings) have been substantially completed.

Section 3: Conceptual Site Model

Topography

The topographic information on the 7.5-minute USGS Topographic Quadrangle Map (Baltimore East, MD) for the Facility vicinity indicates that the ground surface elevations on the Facility range from approximately 120 feet above mean sea level (amsl) on the northeastern portion of the Facility property, to approximately 60 feet amsl on the southernmost portion of the Facility property. A topographic knoll is located on the northeastern portion of the Facility, and the property slopes downward to the southwest, toward southerly flowing Gorsuch Creek. To facilitate redevelopment, cuts and fills were required to establish the mass grades, thereby altering the historic site topography. Surficial drainage in the site vicinity is collected by Gorsuch Creek and is directed toward the south and southwest.

Geology

The Facility is within the Coastal Plain Physiographic Province of the Lower Cretaceous Age. The Coastal Plain is characterized by undifferentiated and interlayered sedimentary deposits derived from eroded and transported rock formations to the north and west.

Statement of Basis

Coastal Plain sediments were deposited in a marine and alluvial environment during periods of fluctuating sea levels. More specifically, the Facility is shown to be underlain by the Patapsco Formation and Artificial Fills. The southwestern portion of the Facility is mapped within Artificial Fills. These materials are described as a heterogeneous mixture of materials such as rock, unconsolidated sediment, slag, refuse, and dredge spoil. The central and northern portions of the Facility are mapped within the clay facies of the Patapsco Formation. The clay facies consist of buff, red-yellow, and brown mottled kaolinitic clays with variable amounts of quartz sand and silt, present as pods and interbeds throughout the clay. The northeastern portion of the Facility is underlain by the sand facies of the Patapsco Formation. These soils consist of well-sorted medium to fine grained quartz sand with locally abundant quartz gravel and clay clasts.

Hydrogeology

Hydrologically, the Coastal Plain is underlain by both unconfined and confined aquifers of unconsolidated sediments, which overlie consolidated bedrock and dip toward the southeast.

Groundwater storage and movement are functions of the primary porosity of the sediments. The groundwater flow direction in the Facility vicinity is assumed to mirror surficial topography. Accordingly, the groundwater flow direction is assumed to be generally toward the south/southwest. Prior evaluations indicated the shallow water table occurs more than 30 feet below ground surface.

Section 4: Summary of Environmental Investigations

A. Historical Investigations

The Facility was the subject of several historical investigations that were conducted between 1984 and 2004 by the EPA, MDE, Bayer AG, and Millennium Holdings, LLC. These investigations included the collection of two waste samples (one from an on-site dumpster), 41 soil samples, and three ground water samples. In addition, ten surface water samples and 11 sediment samples were collected from on and off-site sample locations. The samples were analyzed for a combination of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, metals, and cyanide. The results from these investigations are consistent with the investigations performed after 2006 as detailed below.

B. 2006/2007 Site Characterization

PEMCO has performed investigations of environmental conditions at the Facility jointly under EPA's Facility Lead Program and Maryland's Voluntary Cleanup Program (VCP). The

work has been performed in accordance with the Site Characterization Work Plan dated December 6, 2006 (ERM 2006), which was prepared by Environmental Resources Management, Inc. (ERM) on behalf of PEMCO. EPA approved the Work Plan in January 2007. ERM has also undertaken several focused studies, approved by EPA and MDE, that augment the Work Plan. The results of the site characterization have been documented and submitted to EPA and MDE in a January 2011 report titled Site Characterization and Risk Assessment Report (ERM 2011). The Facility characterization included the following: installation of 92 soil borings, installation of 14 monitoring wells, collection of soil and groundwater samples, installation of 32 soil gas probes, five rounds of landfill gas field screening, and a methane extraction and recovery test.

Soil results were compared to the EPA Regional Screening Levels (RSLs). Arsenic was the most prevalent metal detected in soil at levels above its RSL. Arsenic concentrations ranged from non-detect to 74 mg/kg, the highest concentration found at sample location ESB-27. The only other metals that were detected in at least one soil sample at a concentration above its respective RSL were cobalt and iron. Cobalt was detected in five soil samples and concentrations ranged from 26 mg/kg to 95 mg/kg. These sample locations were below or next to the former manufacturing building at sample locations ESB-8, ESB-27, ESB-30, ESB-31, and ESB-56 or within the landfill at sample location ESB-45. Iron was detected at 100,000 mg/kg at sample location ESB-31, which is located adjacent to the southern side of the former main manufacturing building. Tetrachloroethene (PCE), trichloroethene (TCE), hexachloroethane, and polycyclic aromatic hydrocarbons (PAHs) exceeded their respective RSLs primarily in the vicinity of the landfill and south of the manufacturing complex.

The soil gas results indicated that a high concentration of VOCs, predominantly PCE and TCE, in soil gas is present in the landfill near monitoring wells EGW-10 and EGW-10D. Several of the soil gas sample points detected methane at concentrations ranging from 26.9 to 99.9 percent by volume.

In December 2006, PEMCO Holding Corporation installed nine shallow monitoring wells, designated EGW-1 through EGW-9, throughout the Facility. These wells were completed at depths between 25 to 35 feet below ground surface (bgs), and groundwater was not encountered in any of these wells. In September 2009, a deep monitoring well, EGW-10, was installed in the landfill to a depth of approximately 85 feet bgs, and groundwater was encountered at 67 feet bgs. In November and December 2009, a deeper monitoring well, EGW-10D, was installed next to EGW-10. EGW-10D was completed at a depth of approximately 131 feet bgs. In January 2010, two monitoring wells were installed. EGW-9D was installed next to EGW-9 and was completed at a depth of approximately 55 feet bgs. EGW-11 was installed at the toe of the landfill at a depth of approximately 30 feet bgs. In February 2013, monitoring well EGW-12 was installed at the western Facility property boundary. EGW-12 was installed to a depth of 61 feet bgs and ground water was

encountered at 49 feet bgs. The groundwater samples from EGW-10 contained PCE above its MCL of 5 ug/L (970 µg/L), TCE above its MCL of 5 ug/L (270 µg/L), cis-1,2-dichloroethene above its MCL of 70 ugl (570 µg/L), and carbon tetrachloride above its MCL of of 5 ug/L (21 µg/L). Chloroform was also detected at EGW-10 at concentrations of less than 10 µg/L but above its tap water RSL of 0.190 µg/L. Initial groundwater samples from EGW-10D, EGW-9D, and EGW-11 indicated that there were no exceedances of the MCLs for any VOCs. Carbon tetrachloride (7.7 µg/L) and PCE (12 µg/L) exceeded their MCLs (5 µg/L for both) at EGW-12. Monitoring well EGW-12 is located west of EGW-10 and concentrations were significantly lower in EGW-12 than EGW-10.

C. 2014 Supplemental Characterization

A supplemental site characterization was conducted in 2014 by Geo-Technology Associates, Inc. (GTA) on behalf of TRP-MCB 5601 Eastern, LLC. Activities included soil, groundwater, soil vapor, and methane sampling and field screening. Forty-five borings (GTA-SB-1 through GTA-SB-45) were performed for soil sampling and analysis, and 16 borings (GTA-SV-1 through GTA-SV-16) were advanced for the installation of soil vapor probes. Twenty-two borings were performed to evaluate the depth of fill material in the landfill or for installation of methane monitoring probes. Monitoring wells GTA-MW-1 through GTA-MW-5 were also installed as part of this site characterization.

VOCs did not exceed the EPA RSLs in any of the soil samples analyzed. For SVOCs, benzo(a)anthracene (RSL of 1.1 mg/kg), benzo(a)pyrene (RSL of 0.11 mg/kg), benzo(b)fluoranthene (RSL of 1.1 mg/kg), dibenz(a,h)anthracene (RSL of 0.11 mg/kg), and indeno(1,2,3-cd)pyrene (RSL of 1.1 mg/kg) exceeded their respective RSLs in both surface and subsurface soil. In surface soil, concentrations ranged from non-detect to 2.6 mg/kg for benzo(a)anthracene, non-detect to 2.2 mg/kg for benzo(a)pyrene, non-detect to 2.4 mg/kg for benzo(b)fluoranthene, non-detect to 0.44 mg/kg for dibenz(a,h)anthracene, and non-detect to 1.2 mg/kg for indeno(1,2,3-cd)pyrene. In subsurface soil, concentrations ranged from non-detect to 5.8 mg/kg for benzo(a)anthracene, non-detect to 5.0 mg/kg for benzo(a)pyrene, non-detect to 4.4 mg/kg for benzo(b)fluoranthene, non-detect to 1.1 mg/kg for dibenz(a,h)anthracene, and non-detect to 2.6 mg/kg for indeno(1,2,3-cd)pyrene. The following metals exceeded their respective RSLs in surface and subsurface soil:

- Antimony (RSL of 31 mg/kg): concentrations ranging from non-detect to 330 mg/kg
- Arsenic (RSL of 0.68 mg/kg): concentrations ranging from non-detect to 27 mg/kg
- Cadmium (RSL of 71 mg/kg): concentrations ranging from non-detect to 2,300 mg/kg
- Cobalt (RSL of 23 mg/kg): concentrations ranging from non-detect to 190 mg/kg
- Iron (RSL of 55,000 mg/kg): concentrations ranging from 6,700 to 110,000 mg/kg
- Lead (RSL of 400 mg/kg) with concentrations ranging from 3.2 to 22,000 mg/kg.

Groundwater samples were collected from newly installed monitoring wells GTA-MW-1 through GTA-MW- 5 as well as monitoring wells EGW-9D, EGW-10, and EGW-12. For SVOCs:

- Hexachloroethane exceeded the RSL of 0.33 µg/L in monitoring wells GTA-MW-3, GTA-MW-5, and EGW-10 with concentrations ranging from 11 to 670 µg/L (GTA-MW-5).
- Naphthalene exceeded the RSL of 0.17 µg/L in GTA-MW-5 (29 µg/L).
- Bis(2-ethylhexyl)phthalate exceeded the MCL of 6 µg/L in GTA-MW-4 (9.5 µg/L).

For VOCs:

- 1,1,2,2-tetrachloroethane exceeded the RSL of 0.076 µg/L in GTA-MW-5 (1.5 µg/L) and EGW-10 (1.4 µg/L).
- 1,1-Dichloroethene exceeded the MCL of 7 µg/L in GTA-MW-5 (14 µg/L) and EGW-10 (12 µg/L).
- Carbon tetrachloride exceeded the MCL of 5 µg/L in GTA-MW-2 through GTA-MW-5, EGW-10, and EGW-12 with concentrations ranging from 5.4 to 290 µg/L.
- Chloroform exceeded the MCL of 80 µg/L in GTA-MW-2 (190 µg/L).
- PCE exceeded the MCL of 5 µg/L in GTA-MW-1 through GTA-MW-5, EGW-10, and EGW-12 with concentrations ranging from 14 to 28,000 µg/L (GTA-MW-5).
- TCE exceeded the MCL of 5 µg/L in GTA-MW-2, GTA-MW-3, GTA-MW-5, and EGW-10 with concentrations ranging from 5.7 to 3,400 µg/L (GTA-MW-5).
- Vinyl chloride exceeded the MCL of 2 µg/L in GTA-MW-5 (38 µg/L) and EGW-10 (4.7 µg/L).
- cis-1,2-Dichloroethene exceeded the MCL of 70 µg/L in GTA-MW-5 (12,000 µg/L) and EGW-10 (11,000 µg/L).
- trans-1,2-Dichloroethene exceeded the MCL of 100 µg/L in GTA-MW-5 (310 µg/L) and EGW-10 (290 µg/L).

For dissolved metals:

- Antimony exceeded the MCL of 6 µg/L in GTA-MW-5 (17 µg/L).
- Cobalt exceeded the RSL of 6 µg/L in GTA-MW-1 through GTA-MW-5 with concentrations ranging from 20 to 65 µg/L.
- Iron exceeded the RSL of 14,000 µg/L in GTA-MW-4 (15,000 µg/L) and GTA-MW-5 (18,000 µg/L).
- Lead exceeded the MCL of 15 µg/L in GTA-MW-5 (1,400 µg/L).
- Manganese exceeded the RSL of 430 µg/L in GTA-MW-1 (1,400 µg/L) and GTA-MW-2 (540 µg/L).
- Sodium exceeded the MCL of 1,000 µg/L in all monitoring wells with concentrations ranging from 21,000 to 670,000 µg/L.

Statement of Basis

- Total chromium exceeded the MCL of 100 µg/L in GTA-MW-4 (320 µg/L).

VOCs (carbon tetrachloride, chloroform, PCE, 1,1,2-trichloroethane, TCE, and vinyl chloride) were detected in soil vapor beneath the Facility above their MDE Tier 1 Values. Carbon tetrachloride (MDE Tier 1 of 94 µg/m^3) was found at concentrations ranging from non-detect to 7,600 µg/m^3. Chloroform (MDE Tier 1 of 24 µg/m^3) was found at concentrations ranging from non-detect to 2,300 µg/m^3. PCE (MDE Tier 1 of 840 µg/m^3) was found at concentrations ranging from non-detect to 380,000 µg/m^3. TCE (MDE Tier 1 of 42 µg/m^3) was found at concentrations ranging from non-detect to 23,000 µg/m^3. 1,1,2-Trichloroethane (MDE Tier 1 of 4.2 µg/m^3) was found at concentrations ranging from non-detect to 5.3 µg/m^3. Methane was detected in the central portion of Crystal Hill as high as 61.7% by volume.

D. Supplemental Investigations

As part of the RAP, several supplemental site investigations were performed at the Facility, as summarized below.

In July 2017, GTA performed a Supplemental Site Investigation (SSI) of the suspect polychlorinated biphenyl (PCB) underground storage tank (UST) area on behalf of TRP-MCB 5601 Eastern, LLC. This SSI was performed on the northeastern portion of the Facility, in the vicinity of the former control laboratory building. A geophysical evaluation in the asphalt and concrete-paved areas located in the vicinity of the control laboratory building did not identify anomalies that were considered consistent with an UST. Ten soil borings were installed and sample results did not identify PCBs.

The SSI also further evaluated lead and cadmium soil impacts previously identified at three locations (GTA-SB-11, GTA-SB-26, and GTA-SB-41) on the central and southeastern portions of the Facility. Lead was detected in each of the soil samples obtained but was below the RSL. Cadmium was not detected above the laboratory reporting limit.

In March 2018, TRP-MCB 5601 Eastern, LLC installed six additional soil vapor points to further evaluate impacts surrounding soil vapor sampling location GTA-SV-5. PCE and TCE were detected above the screening levels, with PCE concentrations ranging from 3.4 to 3,600 µg/m^3 and TCE concentrations ranging from non-detect to 150 µg/m^3. Impacts are primarily located beneath the location of the former Warehouse and Main Manufacturing Building.

TRP-MCB 5601 Eastern, LLC performed additional groundwater gauging, sampling, and analysis in March 2018, prior to building demolition and groundwater monitoring well abandonment which had been approved by the EPA and MDE. Five monitoring wells (GTA-MW-1 through GTA-MW-5) installed in 2014 and three wells, previously installed between 2006 and 2009 (EGW-9D, EGW-10, and EGW-12), were assessed and determined to be intact. The eight wells, except for EGW-9D, which was damaged and not sampled in 2018, Statement of Basis

contained exceedances of the MCLs and/or Tapwater RSLs for VOCs, SVOCs, and TAL metals. 1,1-Dichloroethane was detected above the MCL of 7 µg/L in GTA-MW-5 (10 µg/L) and EGW-10 (13 µg/L); carbon tetrachloride exceeded the MCL of 5 µg/L in each well except GTA-MW-1 with concentrations ranging from 5.4 to 410 µg/L; chloroform exceeded the MCL of 80 µg/L in GTA-MW-2 (380) ; PCE exceeded the MCL in GTA-MW-2 (720 µg/L), GTA-MW-3 (12 µg/L), GTA-MW-5 (2,800 µg/L), EGW-10 (5,100 µg/L), and EGW-12 (7.8 µg/L); TCE exceeded the MCL in GTA-MW-2 (170 µg/L), GTA-MW-5 (1,500 µg/L), and EGW-10 (3,200 µg/L); cis-1,2-dichloroethene exceeded the MCL of 70 µg/L in GTA-MW-5 (4,700 µg/L) and EGW-10 (13,000 µg/L); and trans-1,2-dichloroethene exceeded the MCL of 100 µg/L in GTA-MW-5 (180 µg/L) and EGW-10 (310 µg/L). Dissolved cobalt, sodium, and lead were also detected above the MCLs and/or Tapwater RSLs. The monitoring wells installed during the Phase I investigation in 2006 were either abandoned prior to 2014 or were installed too shallow and did not yield any groundwater.

In November 2019, TRP-MCB 5601 Eastern, LLC conducted an additional methane evaluation. Twenty-one methane probes were installed within and surrounding the landfill. Four rounds of methane screening were conducted between November 15, 2019 and December 18, 2019, and on July 24, 2020. The areas where methane was detected corresponded to areas within the landfill, with the areas of highest methane concentrations (GTA-CMM1 and GT-CMM2) corresponding to an area of high methane concentrations observed during prior evaluations.

E. Natural Attenuation

Natural attenuation entails a variety of physical, chemical and/or biological processes that reduce the mass, toxicity, mobility, volume, or concentration of constituents of concern. These processes are classified as degradation (biological or chemical), sorption (chemical) and dispersion, diffusion, dilution, and volatilization (physical).

Although temporal ground water sampling data is limited to multiple sampling events in fall 2009, winter 2010, February 2013, January 2015, and March 2013, it is reasonable to interpret the existing ground water data as indicative of attenuating conditions. The highest detections are of PCE,TCE, and cis-1,2-dichloroethene at the source area in wells GTA-MW-5 and EGW-10 . PCE, TCE, and cis-1,2-dichloroethene concentrations appear to be decreasing in monitoring well GTA-MW-5. In addition, detections of cis-1,2-dichloroethene at GTA-MW-1 through GTA-MW-5 and EGW-10 and detections of vinyl chloride at GTA-MW-5 and EGW-10, along with PCE and TCE, is indicative of natural biodegradation of PCE. cis-1,2-Dichloroethene and vinyl chloride are produced through the natural reductive dechlorination of PCE and TCE.

F. Interim Measures

Soil sampling conducted by TRP-MCB 5601 Eastern, LLC in 2018 identified PCB impacts in two areas: (1) an enclosed transformer room within the northeastern portion of the former warehouse building; and (2) a portion of a concrete floor slab, adjacent to a former transformer pad, in the west-central portion of the color mixing building. The transformers were removed sometime in the past, but it is not known when. In November 2018, PCB-contaminated soil and concrete were delineated in these areas and placed in roll-off dumpsters for off-site disposal. Approximately 161,000 kilograms or 178 tons of material were disposed of at an off-site disposal facility.

During redevelopment activities throughout 2018 and 2019, petroleum-impacts were discovered in certain areas of the Facility. In December 2018 and January 2019, two areas of petroleum-impacted soil were discovered in sewer and storm drain utility runs located on the southeastern portion of the Facility. The petroleum-impacted soil was observed approximately 1-foot bgs and consisted of gray clays and silts that exhibited a petroleum odor. Elevated Photoionization Detector (PID) readings were not observed. Stained soil and petroleum odors were not observed below 5 feet bgs, where native clays were encountered. The approximate area of excavated petroleum-impacted soil that was removed was about 50 feet long, 10 feet wide, and 5 feet deep. The petroleum-impacted soil was staged on and covered with plastic adjacent to the excavation prior to future off-site disposal. No liquids were encountered in the excavation.

In March 2018, an area of petroleum-impacted soil was discovered in a water line utility run located on the southeastern portion of the Facility, contiguous to the impacts identified in December 2018 and in January 2019. The petroleum-impacted soil was observed approximately 1-foot bgs. The soil observations and PID readings were generally consistent to the area of adjacent impacts. Stained soil and petroleum odors were not observed below 3 feet bgs, where native clays were encountered. The area of excavated petroleum-impacted soil that was removed measured approximately 40 feet long, 4 feet wide, and 3 feet deep.

In May and June 2019, petroleum-impacted materials were encountered during footing excavations. An approximately 75-foot section of petroleum-impacted soil was discovered in May 2019. In June 2019, two approximately 25-foot sections of petroleum-impacted soil were discovered north and south of the original 75-foot section. This material was found approximately 3 feet bgs and consisted of an approximately 1½-foot layer of stone, brick, and concrete mixed with soil (petroleum-impacted material). Clays were observed above and below this material, and the clays did not display indications of staining or unusual odors. The petroleum-impacted material exhibited petroleum odors, and PID readings were between 30-60 ppm. No liquids were observed in the excavation. Petroleum-impacted soils were not observed west of the excavation during prior utility installation activities, nor were they observed further east during the installation of interior column footings.

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In 2018, TRP-MCB 5601 Eastern, LLC identified and removed three 8,000-gallon diesel USTs (identified as UST Nos. 2-4), two 500-gallon heating oil USTs (identified as UST Nos. 5 and 6), and a 550-gallon heating oil UST (identified as UST No. 8). It should be noted that UST Nos. 1 and 7 were previously removed from the Facility. A total of 343.7 tons of petroleum impacted soil was removed during all excavation activities described above.

Footnotes for the tables are provided in **Table 1**. Soil borings locations are shown on **Figures 2A** and **2B** and results are provided in **Tables 2** through **4**. Monitoring well locations are shown on **Figures 3A** and **3B** and results are provided in **Tables 5** through **7**. Soil vapor sample locations are shown on **Figures 4A** and **4B** and results are provided in **Table 8**.

Section 5: Human Health Risk Assessment

A Human Health Risk Assessment (HHRA) was performed under the assumption the entire Facility would be redeveloped for non-residential use. The results of the HHRA indicate that there is no unacceptable risk to current or future adolescents or adult trespassers or visitors at any of the undeveloped areas of the Facility. Further, there was no unacceptable risk identified for current or future off-site residents or industrial workers. The HHRA identified a potential for unacceptable risk to the following human health receptors under current or future industrial use conditions of the Facility:

- Presuming future redevelopment of the Facility property, exposure of future building occupants to soil gas via vapor intrusion could result in unacceptable risk to human health.
- Exposure to impacted soils within the approximate extent of VOC impacts (identified on **Figure 2A**) could result in an elevated non-carcinogenic hazard and carcinogenic risk to the construction/utility worker if unprotected exposure were to occur.
- Exposure to soil vapors in a trench within the approximate extent of VOC impacts (identified on **Figure 2A**) could result in an elevated carcinogenic risk to the construction/utility worker.
- Groundwater beneath the Facility contains VOCs and metals at concentrations above the EPA tapwater RSLs and MCLs, which could pose an unacceptable risk to human health receptors at the Facility if used for potable or non-potable purposes. Currently, there are no groundwater supply wells on the Facility.
- Exposure to deep on-site groundwater for non-potable purposes could result in an elevated carcinogenic and noncarcinogenic risk for industrial workers.

The HHRA also concluded that if the Facility is to be redeveloped either as industrial or residential, controls would be required to eliminate the unacceptable risks identified above. The proposed remedy as described in the SB includes these controls. As discussed in the

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Migration of Contaminated Groundwater Under Control Environmental Indicator for the Facility, analytical results from EGW-12 indicate low levels of VOCs are present in groundwater. The concentrations of carbon tetrachloride (6.8 µg/L) and PCE (7.8 µg/L) detected in EGW-12 are significantly lower than at the center of the property (at EGW-10) and are likely attributable to mixing of waters beneath the landfill where flow from the west and east converge at a former stream trace. The risk to off-site receptors west of EGW-12 due to vapor intrusion has been assessed based on the prior ESG-30 and ESG-31 soil gas results and found to be negligible. ESG-30 and ESG-31 are located near EGW-31 and benzene in ESG-31 (696J µg/m^3) was the only constituent that exceeded the MDE Tier 1 value of 72 µg/m^3. VOCs were also non-detect at downgradient monitoring well EGW-9D, except for PCE at 1.1 ug/L, which is below the MCL of 5 ug/L. These data, along with the soil gas results collected as part of the site characterization indicate that VOCs are not migrating towards the property boundary at levels of concern.

Section 6: Corrective Action Objectives

The EPA's Corrective Action Objectives (CAOs) are as follows:

1. **Soil**

   The EPA has determined that hazardous constituents currently remain in Facility soils above acceptable risk levels protective of human health and the environment for residential use. Therefore, the EPA's proposed Corrective Action Objective for Facility soils is to control exposure to the hazardous constituents remaining in surface soils by requiring compliance with and maintenance of engineering controls and land use restrictions.

2. **Groundwater**

   The EPA expects final remedies to return usable groundwater to its maximum beneficial use, where practicable, within a timeframe that is reasonable. For projects where aquifers are either currently used for water supply or have the potential to be used for water supply, EPA will use the National Primary Drinking Water Standard MCLs promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 C.F.R. Part 141. EPA's Corrective Action Objectives for Facility groundwater are 1) to restore the groundwater to drinking water standards, otherwise known as MCLs, or to the relevant RSL for tap water for contaminants that do not have an MCL and, 2) until such time as drinking water standards are restored, to control exposure to the hazardous constituents remaining in the groundwater by requiring the continued implementation of the

groundwater monitoring program and compliance with and maintenance of groundwater use restrictions.

3. **Soil Vapor**

   The EPA's CAO for soil vapor at the Facility is to control human exposure to contaminated subsurface vapor in buildings/structures so that indoor air quality within any such buildings/structures is protective of human health for current and anticipated future uses.

Section 7: Proposed Remedy

The EPA's proposed remedy for all environmental media is as follows:

1. **Soil**

   The EPA's proposed remedy for Facility soil is to install and maintain a cover system on the entire Facility (hardscaped or landscaped cap with marker fabric above the contaminated soil) that controls, minimizes, or eliminates post remedial action migration of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, to the extent necessary to protect human health and the environment. The remaining area of the Facility to be capped (**Figure 5**) includes a small portion undergoing redevelopment (the rest of the Facility has already been capped). The cap shall be designed and constructed to prevent infiltration to mitigate potential cross-media migration (soil to groundwater) of COCs. The cap shall be functionally equivalent to the performance standards documented in 40 C.F.R. Section 265.310.

   A Containment Remedy Operations and Maintenance (O&M) Plan and Health and Safety Plan shall be submitted for EPA and MDE review and approval and, at a minimum will include the following: the procedures to maintain the cap over the contaminated soil; a schedule for inspections to be performed as part of cap maintenance, no less frequent than once a year; physical maintenance requirements of the capped areas to prevent degradation of the cap and unacceptable exposure to the underlying soil.

2. **Groundwater**

   The EPA's proposed remedy for Facility groundwater consists of monitored natural attenuation until MCLs or, if no MCLs exist, the RSLs for tap water are met.

   Data show the plume is stable and levels of TCE and PCE are naturally attenuating. The highest concentrations are of PCE, TCE, and cis-1,2-dichloroethene at the source

area in wells GTA-MW-5 and EGW-10 and concentrations appear to be stable or decreasing .Additionally, detections of cis-1,2-dichloroethene at GTA-MW-1 through GTA-MW-5 and EGW-10 and detections of vinyl chloride at GTA-MW-5 and EGW-10, along with PCE and TCE, is indicative of natural biodegradation of PCE. Cis-1,2-Dichloroethene and vinyl chloride are produced through the natural reductive dechlorination of PCE and TCE.

Monitoring wells shall be installed pursuant to an EPA-approved Work Plan and long-term groundwater monitoring shall be required. Additionally, groundwater restrictions, which prohibit onsite use, shall remain in place to prevent exposure to contaminants while levels remain above MCLs or RSLs, as applicable. The source removal in the form of soil excavations discussed in Section 4 and the permanent cover system at the Facility that will reduce stormwater infiltration will aid in the further attenuation of contamination.

3. Soil Vapor

a. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.

b. The integrity of vapor intrusion control systems installed in existing buildings shall be maintained.

c. All vapor intrusion control systems shall be inspected, maintained, and repaired as needed.

d. Atmospheric pressure differentials and other factors such as soil permeability, moisture content, etc., may cause accumulation of methane beneath hardscaped paved areas, and shall be addressed by installation of vapor vents located at light pole locations within the parking lots.

4. Institutional Controls

The EPA's proposed remedy also includes the following land and groundwater use restrictions and notifications to protect human health and the integrity of the remedy:

a. Groundwater at the Facility shall not be used for any purpose other than the operation, maintenance, and monitoring activities currently being conducted at the Facility and activities required by the EPA and MDE, unless it is

demonstrated to the EPA and MDE that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy, and the current Facility owner obtains prior written approval from the EPA and MDE for such use.

b. No new wells shall be installed on the Facility unless it is demonstrated to the EPA and MDE that such wells are necessary to implement the final remedy for the Facility, and the current owner obtains prior written approval from the EPA and MDE to install such wells.

c. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.

d. The integrity of vapor intrusion control systems installed in existing buildings shall be maintained.

e. All vapor intrusion control systems shall be inspected, maintained, and repaired as needed.

f. Compliance with the EPA and MDE-approved O&M Plan. The O&M Plan will require the current Facility owner to maintain the integrity of the vapor intrusion control systems and all caps and covers on the Facility by conducting regular periodic inspections (no less frequently than once per year), making timely repairs if needed, and maintaining a record of such inspection and maintenance. The O&M Plan will also establish the documentation, reporting, and notification methods that will be used to implement, monitor compliance, and ensure the O&M Plan remains in place and effective.

g. All earthmoving activities on the Facility, including excavation, grading, and/or utility construction, shall be conducted in compliance with an EPA and MDE-approved O&M Plan to ensure that the activity will not pose a threat to human health and the environment or adversely affect or interfere with the covered areas.

h. On an annual basis and whenever requested by the EPA or MDE, the current Facility owner shall submit to MDE and the EPA a written certification stating whether the owner is maintaining and complying with all groundwater and land use restrictions.

i. The Facility shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the final remedy.

The land and groundwater use restrictions necessary to prevent human exposure to contaminants at the Facility will be implemented through enforceable Institutional Controls (ICs) such as an order and/or an Environmental Covenant pursuant to the Maryland Uniform Environmental Covenants Act, §§ 1-80 I through 1-815 of the Environment Article, Annotated Code of Maryland to be recorded with the deed for the Facility property. If the EPA determines that additional monitoring activities, institutional controls, or other corrective actions are necessary to protect human health or the environment, the EPA has the authority to require and enforce such additional corrective actions through an enforceable mechanism which may include an order or Environmental Covenant, provided any necessary public participation requirements are met. If any individual with an interest in the Facility property believes that information shows that any use restrictions proposed and later selected by the EPA are no longer necessary to protect public health and the environment, the individual may submit such information to the EPA for consideration. The EPA can change any such restriction if it determines it is no longer necessary, after any required public comment period.

Section 8: Evaluation of Proposed Remedy

This section provides a description of the criteria the EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, the EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, the EPA then evaluates seven balancing criteria.

Threshold Criteria	**Evaluation**
1) Protect human health and the environment	The EPA's proposed remedy for the Facility protects human health and the environment by eliminating, reducing, or controlling unacceptable risk through the implementation and maintenance of environment use restrictions and engineering controls for contaminated soil and groundwater above acceptable residential use levels. <u>Soil</u> A cap installed throughout the entire Facility will protect human health and environmental exposure by preventing direct contact.

	Groundwater Human health and environmental exposure for groundwater will be protected through restrictions on potable groundwater use. The proposed use restrictions at the Facility will eliminate future unacceptable exposures to groundwater until MCLs or the RSLs for tap water, if no MCLs exist, are met. Soil Vapor All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as needed. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.
2) Achieve media cleanup objectives	The EPA's proposed remedy achieves media cleanup objectives based on assumptions regarding current and reasonably anticipated land and water resource use(s). The proposed remedy in this SB is based on an anticipated residential land use. Soil The permanent cover system at the Facility will prevent direct contact to impacted soils and will reduce stormwater infiltration to impacted groundwater and prevent receptor direct contact exposure. Groundwater Data show the plume is stable and concentrations of contaminants of concern are naturally attenuating. The proposed use restrictions at the Facility will eliminate future unacceptable exposures to and groundwater until MCLs or the RSLs for tap water, if no MCLs exist, are met. Soil Vapor All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as

	needed. The vapor intrusion control systems include alarms to indicate if indoor air concentrations exceed the cleanup criteria.
3) Remediating the Source of Releases	In all proposed remedies, EPA seeks to eliminate or further reduce releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment, and this proposed remedy meets this objective. The sources of petroleum and PCB releases have been removed from Facility soils, thereby eliminating, to the extent practicable, further releases of hazardous constituents from on-site soils as well as groundwater. <u>Soil</u> The permanent cover system at the Facility will prevent direct contact to impacted soils and will reduce stormwater infiltration to impacted groundwater and prevent receptor direct contact exposure. <u>Groundwater</u> Data show the plume is stable and concentrations of contaminants of concern are naturally attenuating. The proposed use restrictions at the Facility will eliminate future unacceptable exposures to groundwater until MCLs or the RSLs for tap water, if no MCLs exist, are met. Groundwater monitoring of the onsite wells will continue long-term. <u>Soil Vapor</u> All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as needed. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.
Balancing Criteria	**Evaluation**
1) Long-term	<u>Soil</u>

effectiveness	The long-term effectiveness of the permanent cover system will be maintained by the implementation of institutional controls. Groundwater The long-term effectiveness of the remedy will be maintained by the implementation of land and groundwater use restrictions. The groundwater use restrictions will be maintained until MCLs or the RSLs for tap water, if no MCLs exist, are met. Soil Vapor All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as needed.
2) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	Soil The permanent cover system at the Facility will reduce the mobility of soil contaminants. The sources of petroleum and PCB releases have been removed from the soil at the Facility, thereby eliminating further releases of hazardous constituents from on-site soils. Groundwater Groundwater contaminant levels are anticipated to achieve MCLs through natural attenuation; groundwater use will be restricted to prevent exposure until MCLs or the RSLs for tap water, if no MCLs exist, are met. Soil Vapor All structures on the Facility are protected by a vapor intrusion control system.
3) Short-term effectiveness	Soil The permanent cover system at the Facility provides immediate risk reduction. Additionally, the EPA's proposed remedy takes into consideration future activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment, by requiring notification of these activities to the EPA and MDE.

	Groundwater The use restrictions would become effective immediately upon implementation through an enforceable mechanism such as an EC or order. Soil Vapor The vapor intrusion control systems provide immediate risk reduction.
4) Implementability	The proposed remedy is readily implementable. The implementation of use restrictions will be through a mechanism that will inform future owners and occupants of these restrictions, such as an environmental covenant, permit, or order.
5) Cost	The costs associated with this proposed remedy are associated with the development and recording of the Environmental Covenant, permit, or order; cap and vapor intrusion control system maintenance and inspections; reporting; installation of new monitoring wells; and continued sampling and maintenance of the monitoring wells.
6) Community Acceptance	The EPA will evaluate community acceptance based on comments received during the public comment period and will address any comments in the Final Decision.
7) State/Support Agency Acceptance	State involvement has been solicited throughout the RCRA corrective action process and MDE concurred with the proposed remedy.

Overall, based on the evaluation criteria, the EPA has determined the proposed remedy meets the threshold criteria and provides the best balance of tradeoffs with respect to the evaluation criteria.

Section 9: Financial Assurance

PEMCO will be required to demonstrate and maintain financial assurance for completion of the remedy pursuant to the standards contained in Federal regulations 40 C.F.R. § 264.145 and 40 CFR § 264.143.

Section 10: Public Participation

The public may participate in the remedy selection process by reviewing this SB and documents contained in the AR for the Facility and providing comments. The AR contains all information considered by EPA when proposing this remedy. The AR documents are available for public review at the location below:

U.S. EPA Region 3
4 Penn Center
1600 JFK Boulevard
Philadelphia, PA 19103
Contact: Christine Kimak (3LD11)
Phone: 215-814-2798
Email: kimak.christine@epa.gov

The public comment period will last thirty (30) calendar days from the date that the notice is published in a local newspaper. You may submit comments by mail or e-mail to Christine Kimak. EPA will hold a public meeting to discuss this proposed remedy upon request. If you would like to request a public meeting, please contact Christine Kimak.

The EPA will respond to all relevant comments received during the comment period. If the EPA determines that new information warrants a modification to the proposed remedy, the EPA will modify the proposed remedy or select an alternative based on the new information and/or public comments. In the Final Decision, the EPA will announce the selection of its final remedy, respond to all relevant comments received, and explain the rationale for any changes to the proposed remedy. All persons who comment on this proposed remedy will receive a copy of the Final Decision. Others may obtain a copy by contacting Christine Kimak at the address listed above. The Final Decision will also be made publicly available on the EPA's website for the Facility.

Section 11: Signature

Driscoll, Stacie Digitally signed by Driscoll, Stacie
Date: 2024.05.24 14:11:32 -04'00'

_____ Date: _____

Stacie Driscoll, Acting Director
Land, Chemicals, and Redevelopment Division
US EPA, Region 3

Section 12: Index to Administrative Record

ERM. 2006. Site Characterization Work Plan. December.

ERM. 2011. Site Characterization and Risk Assessment Report.

ERM. 2013 Final Site Characterization and Risk Assessment Report for 5601 Eastern Avenue, Baltimore, Maryland. May.

GTA. 2014. Report of Phase I Environmental Site Assessment: Former PEMCO Facility. April.

GTA. 2016. Response Action Plan. April.

GTA. 2018a. Site Update Response. April.

GTA. 2018b. Soil Vapor Screening and Assessment. April.

GTA. 2018c. Groundwater Evaluation Summary. May.

GTA. 2020. Response Action Plan Completion Report: Yard 56 – Road and Retails Parcels. November.

USEPA. 2020. Statement of Basis: PEMCO Inc. Lots 27C and 28. May.

Section 13: Attachments

Table 1 – Characterization Sampling Key
Table 2A – VOC Soil Characterization Summary, 2014-2017 Sampling
Table 2B – VOC Soil Characterization Summary, Pre-2014 Sampling
Table 3A – SVOC and PCB Soil Characterization Summary, 2014 Sampling
Table 3B – SVOC and PCB Soil Characterization Summary, Pre-2014 Sampling
Table 4 – Metals Soil Characterization Summary, 2014-2017 Sampling
Table 5 – SVOC Groundwater Characterization Summary
Table 6 – VOC Groundwater Characterization Summary
Table 7 – Metals Groundwater Characterization Summary
Table 8 – Soil Vapor Analysis Summary

Figure 1 – Site Location Map

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Tables

Table 1
Characterization Sampling Key

Soil Characterization Summary Tables (Tables 2 through 4)	**Groundwater Characterization Summary Tables (Tables 5 through 7)**
Results in milligrams per kilogram (mg/kg) or parts per million (ppm) or micrograms per kilogram (µg/kg), similar to parts per billion (ppb)	Results in micrograms per liter (µg/L), similar to parts per billion (ppb)
USEPA = United States Environmental Protection Agency	USEPA = United States Environmental Protection Agency
RSL = USEPA November 2017 Regional Screening Level	RSL = USEPA November 2017 Regional Screening Level
NE = USEPA Region 3 Standard Not Established	MCL = USEPA Region 3 groundwater Maximum Contaminant Level
Blank Cell = Not analyzed	* = MCL not established therefore USEPA Region 3 Tapwater RSLs utilized as comparison value
Shaded values represent exceedance of the USEPA Region 3 Residential Soil RSLs	** = Laboratory Method Detection Limit was used in place of laboratory reporting limit
SVOCs = Semi-Volatile Organic Compounds	NE = USEPA Region 3 standard not established
PCBs = Polychlorinated Biphenyls	Blank Cell = Not analyzed
VOCs = Volatile Organic Compounds	Shaded values represent exceedance of the USEPA Region 3 MCL or RSLs as noted
B = Analyte not detected substantially above concentration found in the laboratory or field blank	SVOCs = Semi-Volatile Organic Compounds
J = The target analyte was positively identified below the reporting limit but greater than the Method Detection Limit	VOCs = Volatile Organic Compounds
K = Analyte present, the reported value is biased high actual value is expected lower	Only exceedances of dissolved Target Analyte List Metals are indicated
L = Analyte present, the reported value is biased low, actual value is expected higher	J = The target analyte was positively identified below the reporting limit but greater than the Method Detection Limit
DUP = Duplicate sample	U = analyte not detected.
Detected compounds shown in black	E = The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
	L = Analyte present, the reported value is biased low, actual value is expected higher.
	DUP = Duplicate sample
	Detected compounds shown in black

Table 2A
VOC Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-1	GTA-SB-2	GTA-SB-3	GTA-SB-4	GTA-SB-5	GTA-SB-6	GTA-SB-7	GTA-SB-8	GTA-SB-9	GTA-SB-10
Depth (feet)		4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5
Sample Date		11/17/2014								11/17/2014	
TCL VOCs	(ug/kg)										
1,1,1-Trichloroethane	8,100,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,1,2,2-Tetrachloroethane	2,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,1,2-Trichloro-1,2,2-Trifluoroethane	6,700,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,1,2-Trichloroethane	1,100	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,1-Dichloroethane	3,600	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,1-Dichloroethene	230,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,2,3-Trichlorobenzene	63,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,2,4-Trichlorobenzene	24,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,2-Dibromo-3-Chloropropane	5.3	<36	<39	<29	<32	<43	<35	<38	<40	<36	<42
1,2-Dibromoethane (EDB)	36	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,2-Dichlorobenzene	1,800,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,2-Dichloroethane	46	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,2-Dichloropropane	2,500	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,3-Dichlorobenzene	NE	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
1,4-Dichlorobenzene	2,600	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
2-Butanone (MEK)	27,000,000	<18	<20	<15	<16	<21	<17	<19	<20	<18	<21
2-Hexanone	200,000	<18	<20	<15	<16	<21	<17	<19	<20	<18	<21
4-Methyl-2-Pentanone	33,000,000	<18	<20	<15	<16	<21	<17	<19	<20	<18	<21
Acetone	61,000,000	<18	<20	<15	<16	<21	<17	<19	<20	<18	<21
Benzene	1,200	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Bromochloromethane	150,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Bromodichloromethane	290	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Bromoform	19,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Bromomethane	6,800	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Carbon Disulfide	770,000	<9.0	<9.8	<7.3	<8.0	<11	<8.7	<9.5	<10	<9.1	<10
Carbon Tetrachloride	650	6.2	18	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Chlorobenzene	280,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Chloroethane	14,000,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Chloroform	320	12	8.0	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Chloromethane	110,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Cyclohexane	6,500,000	<18	<20	<15	<16	<21	<17	<19	<20	<18	<21
Dibromochloromethane	8,300	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Dichlorodifluoromethane	87,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Ethylbenzene	5,800	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Isopropylbenzene	1,900,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Methyl Acetate	78,000,000	<18	<20	<15	<16	<21	<17	<19	<20	<18	<21
Methyl-t-butyl ether	47,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Methylcyclohexane	NE	<18	<20	<15	<16	<21	<17	<19	<20	<18	<21
Methylene Chloride	57,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Naphthalene	3,800	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Styrene	6,000,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Tetrachloroethene	24,000	<4.5	12	280	<4.0	<5.3	9.8	<4.8	<5.0	<4.5	<5.2
Toluene	4,900,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Trichloroethene	940	<4.5	<4.9	15	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Trichlorofluoromethane	23,000,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
Vinyl Chloride	59	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
cis-1,2-Dichloroethene	160,000	<4.5	<4.9	4.7	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
cis-1,3-Dichloropropene	NE	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
m,p-Xylenes	1,010,000	<9.0	<9.8	<7.3	<8.0	<11	<8.7	<9.5	<10	<9.1	<10
o-Xylene	650,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
trans-1,2-Dichloroethene	1,600,000	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2
trans-1,3-Dichloropropene	NE	<4.5	<4.9	<3.6	<4.0	<5.3	<4.3	<4.8	<5.0	<4.5	<5.2

Table 2A
VOC Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-11	GTA-SB-12	GTA-SB-13	GTA-SB-14	GTA-SB-15	GTA-SB-16	GTA-SB-17	GTA-SB-18	GTA-SB-23	GTA-SB-24
Depth (feet)		4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5
Sample Date		11/17/2014						11/17/2014		11/18/2014	
TCL VOCs	(ug/kg)										
1,1,1-Trichloroethane	8,100,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,1,2,2-Tetrachloroethane	2,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,1,2-Trichloro-1,2,2-Trifluoroethane	6,700,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,1,2-Trichloroethane	1,100	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,1-Dichloroethane	3,600	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,1-Dichloroethene	230,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,2,3-Trichlorobenzene	63,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,2,4-Trichlorobenzene	24,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,2-Dibromo-3-Chloropropane	5.3	<39	<39	<41	<34	<40	<39	<44	<33	<38	<36
1,2-Dibromoethane (EDB)	36	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,2-Dichlorobenzene	1,800,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,2-Dichloroethane	46	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,2-Dichloropropane	2,500	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,3-Dichlorobenzene	NE	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
1,4-Dichlorobenzene	2,600	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
2-Butanone (MEK)	27,000,000	<20	<19	<21	<17	<20	<19	<22	<16	<19	<18
2-Hexanone	200,000	<20	<19	<21	<17	<20	<19	<22	<16	<19	<18
4-Methyl-2-Pentanone	33,000,000	<20	<19	<21	<17	<20	<19	<22	<16	<19	<18
Acetone	61,000,000	30	<19	<21	<17	<20	<19	<22	<16	<19	<18
Benzene	1,200	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Bromochloromethane	150,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Bromodichloromethane	290	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Bromoform	19,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Bromomethane	6,800	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Carbon Disulfide	770,000	<9.8	<9.6	<10	<8.6	<10	<9.6	<11	<8.2	<9.5	<9.1
Carbon Tetrachloride	650	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Chlorobenzene	280,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Chloroethane	14,000,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Chloroform	320	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Chloromethane	110,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Cyclohexane	6,500,000	<20	<19	<21	<17	<20	<19	<22	<16	<19	<18
Dibromochloromethane	8,300	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Dichlorodifluoromethane	87,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Ethylbenzene	5,800	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Isopropylbenzene	1,900,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Methyl Acetate	78,000,000	<20	<19	<21	<17	<20	<19	<22	<16	<19	<18
Methyl-t-butyl ether	47,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Methylcyclohexane	NE	<20	<19	<21	<17	<20	<19	<22	<16	<19	<18
Methylene Chloride	57,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Naphthalene	3,800	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Styrene	6,000,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Tetrachloroethene	24,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Toluene	4,900,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Trichloroethene	940	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Trichlorofluoromethane	23,000,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
Vinyl Chloride	59	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
cis-1,2-Dichloroethene	160,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
cis-1,3-Dichloropropene	NE	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
m,p-Xylenes	1,010,000	<9.8	<9.6	<10	<8.6	<10	<9.6	<11	<8.2	<9.5	<9.1
o-Xylene	650,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
trans-1,2-Dichloroethene	1,600,000	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6
trans-1,3-Dichloropropene	NE	<4.9	<4.8	<5.1	<4.3	<5.0	<4.8	<5.5	<4.1	<4.7	<4.6

Table 2A
VOC Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-25	GTA-SB-26	GTA-SB-27	GTA-SB-28	GTA-SB-29	GTA-PCB-10	GTA-PCB-7	GTA-PCB-6	GTA-PCB-4	GTA-PCB-2
Depth (feet)		4-5	4-5	4-5	4-5	4-5	10	7	6	4	2
Sample Date		11/18/2014					7/10/2017				
TCL VOCs	(ug/kg)										
1,1,1-Trichloroethane	8,100,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,1,2,2-Tetrachloroethane	2,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,1,2-Trichloro-1,2,2-Trifluoroethane	6,700,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,1,2-Trichloroethane	1,100	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,1-Dichloroethane	3,600	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,1-Dichloroethene	230,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,2,3-Trichlorobenzene	63,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,2,4-Trichlorobenzene	24,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,2-Dibromo-3-Chloropropane	5.3	<36	<48	<37	<37	<46	<35	<36	<34	<33	<35
1,2-Dibromoethane (EDB)	36	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,2-Dichlorobenzene	1,800,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,2-Dichloroethane	46	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,2-Dichloropropane	2,500	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,3-Dichlorobenzene	NE	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
1,4-Dichlorobenzene	2,600	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
2-Butanone (MEK)	27,000,000	<18	<24	<19	<18	<23	<17	<18	<17	<17	<17
2-Hexanone	200,000	<18	<24	<19	<18	<23	<17	<18	<17	<17	<17
4-Methyl-2-Pentanone	33,000,000	<18	<24	<19	<18	<23	<17	<18	<17	<17	<17
Acetone	61,000,000	23	40	<19	65	<23	<17	<18	<17	<17	<17
Benzene	1,200	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Bromochloromethane	150,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Bromodichloromethane	290	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Bromoform	19,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Bromomethane	6,800	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Carbon Disulfide	770,000	<9.0	<12	<9.3	<9.2	<12	<8.6	<9.0	<8.6	<8.4	<8.6
Carbon Tetrachloride	650	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Chlorobenzene	280,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Chloroethane	14,000,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Chloroform	320	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Chloromethane	110,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Cyclohexane	6,500,000	<18	<24	<19	<18	<23	<17	<18	<17	<17	<17
Dibromochloromethane	8,300	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Dichlorodifluoromethane	87,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Ethylbenzene	5,800	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Isopropylbenzene	1,900,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Methyl Acetate	78,000,000	<18	<24	<19	<18	<23	<17	<18	<17	<17	<17
Methyl-t-butyl ether	47,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Methylcyclohexane	NE	<18	<24	<19	<18	<23	<17	<18	<17	<17	<17
Methylene Chloride	57,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Naphthalene	3,800	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Styrene	6,000,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Tetrachloroethene	24,000	<4.5	8.2	<4.7	<4.6	<5.8	4.8	8.9	<4.3	<4.2	4.8
Toluene	4,900,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Trichloroethene	940	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Trichlorofluoromethane	23,000,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
Vinyl Chloride	59	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
cis-1,2-Dichloroethene	160,000	<4.5	28	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
cis-1,3-Dichloropropene	NE	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
m,p-Xylenes	1,010,000	<9.0	<12	<9.3	<9.2	<12	<8.6	<9.0	<8.6	<8.4	<8.6
o-Xylene	650,000	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
trans-1,2-Dichloroethene	1,600,000	<4.5	13	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3
trans-1,3-Dichloropropene	NE	<4.5	<6.0	<4.7	<4.6	<5.8	<4.3	<4.5	<4.3	<4.2	<4.3

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-2	ESB-2	ESB-6	ESB-7	ESB-8	ESB-8 DUP	ESB-16	ESB-16
Depth (feet)		0-0.5	4-5	4-5	4-5	9-10	9-10	3-4	9-10
Sample Date		12/13/2006				12/26/2006		12/13/2006	
VOCs	(mg/kg)								
Acetone	61,000	<0.021	<0.016	<0.023	<0.020	<0.020	<0.023	<0.019	<0.030
Benzene	1.2	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Butanone, 2- (MEK)	27,000	<0.021	<0.016	<0.023	<0.020	<0.020	<0.023	<0.019	<0.019
Carbon Disulfide	770	<0.101	<0.008	<0.102	<0.102	<0.010	<0.101	<0.010	<0.010
Carbon tetrachloride	0.65	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Chlorobenzene	280	<0.005	<0.005	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Chloroform	0.32	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
cis-1,2-Dichloroethene	160	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Cyclohexane	6,500	<0.021	<0.016	<0.023	0.027	<0.020	<0.023	<0.019	<0.019
Dichlorobenzene, 1,2-	1,800	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Dichlorobenzene,1,3-	NE	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Dichloroethene, 1,1-	230	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Ethylbenzene	5.8	<0.005	<0.004	<0.006	0.014	<0.005	<0.006	<0.005	<0.005
Hexanone, 2-(MBK)	200	<0.021	<0.016	<0.023	<0.020	<0.020	<0.023	<0.019	<0.019
Isopropylbenzene	1,900	<0.005	<0.004	<0.006	0.007	<0.005	<0.006	<0.005	<0.005
m&p-Xylene	1,010	<0.011	<0.008	<0.012	0.065	<0.010	<0.011	<0.010	<0.019
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<0.021	<0.016	<0.023	<0.020	<0.020	<0.023	<0.019	<0.019
Methylcyclohexane	NE	<0.021	<0.016	<0.023	4.3 K	<0.020	<0.023	<0.019	<0.019
Methylene chloride	57	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Naphthalene	3.8	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
o-Xylene	650	<0.005	<0.004	<0.006	0.023	<0.005	<0.006	<0.005	<0.005
Tetrachloroethane, 1,1,2,2-	2.0	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Tetrachloroethene	24	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Toluene	4,900	<0.005	<0.004	<0.006	0.005 J	<0.005	<0.006	<0.005	<0.005
trans-1,2-Dichloroethene	1,600	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Trichloroethene	0.94	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Trichlorofluoromethane	23,000	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005
Vinyl Chloride	0.059	<0.005	<0.004	<0.006	<0.006	<0.005	<0.006	<0.005	<0.005

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-17	ESB-18	ESB-19	ESB-22	ESB-22	ESB-34	ESB-34	ESB-35
Depth (feet)		0-0.5	0-0.5	0-0.5	0-0.5	4-5	0-0.5	4-5	4-5
Sample Date		12/08/2006	12/14/2006	12/13/2006	12/12/2006		12/13/2006		12/08/2006
VOCs	(mg/kg)								
Acetone	61,000	0.062	<0.019	<0.020	<0.018	<0.023	<0.018	<0.015	<0.019
Benzene	1.2	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Butanone, 2- (MEK)	27,000	<0.030	<0.019	<0.020	<0.018	<0.023	<0.018	<0.015	<0.019
Carbon Disulfide	770	<0.105	<0.010	<0.010	<0.009	<0.102	<0.009	<0.007	<0.01
Carbon tetrachloride	0.65	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Chlorobenzene	280	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Chloroform	0.32	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
cis-1,2-Dichloroethene	160	<0.007	<0.005	0.003J	<0.005	<0.006	<0.005	<0.004	<0.005
Cyclohexane	6,500	<0.030	<0.019	<0.020	<0.018	<0.023	<0.018	<0.015	<0.019
Dichlorobenzene, 1,2-	1,800	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Dichlorobenzene,1,3-	NE	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Dichloroethene, 1,1-	230	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Ethylbenzene	5.8	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Hexanone, 2-(MBK)	200	<0.030	<0.019	<0.020	<0.018	<0.023	<0.018	<0.015	<0.019
Isopropylbenzene	1,900	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
m&p-Xylene	1,010	<0.015	<0.009	<0.010	<0.009	<0.012	<0.009	<0.007	<0.01
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<0.030	<0.019	<0.020	<0.018	<0.023	<0.018	<0.015	<0.019
Methylcyclohexane	NE	<0.030	<0.019	<0.020	<0.018	<0.023	<0.018	<0.015	<0.019
Methylene chloride	57	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Naphthalene	3.8	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
o-Xylene	650	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Tetrachloroethane, 1,1,2,2-	2.0	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Tetrachloroethene	24	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Toluene	4,900	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
trans-1,2-Dichloroethene	1,600	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Trichloroethene	0.94	<0.007	<0.005	0.091	<0.005	<0.006	<0.005	<0.004	<0.005
Trichlorofluoromethane	23,000	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005
Vinyl Chloride	0.059	<0.007	<0.005	<0.005	<0.005	<0.006	<0.005	<0.004	<0.005

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-42B	ESB-44	ESB-44	ESB-47	ESB-53B	ESB-54	ESB-54	ESB-54 DUP
Depth (feet)		14-15	0-0.5	4-5	3-4	11-12	0-0.5	3-3.5	3-3.5
Sample Date		12/12/2006	12/26/2006		12/08/2006	12/12/2006	01/18/2007		
VOCs	(mg/kg)								
Acetone	61,000	<0.021	<0.018	<0.022	<0.021	0.025 K	<0.019	<0.021	<0.033
Benzene	1.2	0.74 K	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Butanone, 2- (MEK)	27,000	0.086 K	<0.018	<0.022	<0.021	<0.02	<0.019	<0.021	<0.033
Carbon Disulfide	770	<0.01	<0.009	-<0.01	<0.011	<0.01	<0.005	<0.005	<0.033
Carbon tetrachloride	0.65	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Chlorobenzene	280	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Chloroform	0.32	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
cis-1,2-Dichloroethene	160	<0.005	<0.005	<0.005	0.003 K	<0.005	<0.005	<0.005	<0.008
Cyclohexane	6,500	0.07 K	<0.018	<0.022	<0.021	<0.02	<0.019	<0.021	<0.033
Dichlorobenzene, 1,2-	1,800	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Dichlorobenzene,1,3-	NE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Dichloroethene, 1,1-	230	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Ethylbenzene	5.8	0.17 K	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Hexanone, 2-(MBK)	200	0.086 K	<0.018	<0.022	<0.021	<0.02	<0.019	<0.021	<0.033
Isopropylbenzene	1,900	0.009 K	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
m&p-Xylene	1,010	0.500 K	<0.009	-<0.011	<0.011	<0.01	<0.01	<0.01	<0.016
Methyl, 4-Pentanone, -2- (MIBK)	33,000	0.043 K	<0.018	<0.022	<0.021	<0.02	<0.019	<0.021	<0.033
Methylcyclohexane	NE	0.026 K	<0.018	<0.022	<0.021	<0.02	<0.019	<0.021	<0.033
Methylene chloride	57	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Naphthalene	3.8	0.12 K	0.007 K	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
o-Xylene	650	0.22 K	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Tetrachloroethane, 1,1,2,2-	2.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Tetrachloroethene	24	<0.005	<0.005	0.039 K	0.045 K	<0.005	<0.005	<0.005	<0.008
Toluene	4,900	1.5 K	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
trans-1,2-Dichloroethene	1,600	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Trichloroethene	0.94	<0.005	<0.005	<0.005	0.022 K	<0.005	<0.005	<0.005	<0.008
Trichlorofluoromethane	23,000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008
Vinyl Chloride	0.059	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-56	ESB-56	ESB-59	ESB-60	ESB-60	ESB-61	ESB-61	ESB-62
Depth (feet)		0-0.5	2-3	0-0.83	9-10	19-20	2-3	14-15	3-4
Sample Date		01/18/2007		08/14/2007	08/14/2007				
VOCs	(mg/kg)								
Acetone	61,000	0.03	<0.02	<0.02	<0.02	<0.018	<0.019	<0.018	<0.018
Benzene	1.2	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Butanone, 2- (MEK)	27,000	<0.019	<0.02	<0.02	<0.02	<0.018	<0.019	<0.018	<0.018
Carbon Disulfide	770	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Carbon tetrachloride	0.65	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chlorobenzene	280	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Chloroform	0.32	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
cis-1,2-Dichloroethene	160	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyclohexane	6,500	<0.019	<0.02	<0.02	<0.02	<0.018	<0.019	<0.018	<0.018
Dichlorobenzene, 1,2-	1,800	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dichlorobenzene,1,3-	NE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Dichloroethene, 1,1-	230	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	5.8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Hexanone, 2-(MBK)	200	<0.019	<0.02	<0.02	<0.02	<0.018	<0.019	<0.018	<0.018
Isopropylbenzene	1,900	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
m&p-Xylene	1,010	<0.01	<0.01	<0.01	<0.01	<0.009	<0.009	<0.009	<0.009
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<0.019	<0.02	<0.02	<0.02	<0.018	<0.019	<0.018	<0.018
Methylcyclohexane	NE	<0.019	<0.02	<0.02	<0.02	<0.018	<0.019	<0.018	<0.018
Methylene chloride	57	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Naphthalene	3.8	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
o-Xylene	650	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethane, 1,1,2,2-	2.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Tetrachloroethene	24	<0.005	<0.005	<0.005	0.59	<0.005	<0.005	<0.005	<0.005
Toluene	4,900	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
trans-1,2-Dichloroethene	1,600	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Trichloroethene	0.94	<0.005	<0.005	<0.005	0.59	<0.005	<0.005	<0.005	<0.005
Trichlorofluoromethane	23,000	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Vinyl Chloride	0.059	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-62	ESB-63	ESB-63	ESB-64	ESB-64 DUP	ESB-64	ESB-65	ESB-65
Depth (feet)		14-15	7-8	14-15	5-6	5-6	14-15	8-9	14-15
Sample Date		08/14/2007							
VOCs	(mg/kg)								
Acetone	61,000	<0.018	<0.018	<0.017	<0.019	<0.021	<0.018	<0.019	<0.017
Benzene	1.2	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Butanone, 2- (MEK)	27,000	<0.018	<0.018	<0.017	<0.019	<0.021	<0.018	<0.019	<0.017
Carbon Disulfide	770	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005	<0.010
Carbon tetrachloride	0.65	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Chlorobenzene	280	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Chloroform	0.32	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
cis-1,2-Dichloroethene	160	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Cyclohexane	6,500	<0.018	<0.018	<0.017	<0.019	<0.021	<0.018	<0.019	<0.017
Dichlorobenzene, 1,2-	1,800	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Dichlorobenzene,1,3-	NE	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Dichloroethene, 1,1-	230	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Ethylbenzene	5.8	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Hexanone, 2-(MBK)	200	<0.018	<0.018	<0.017	<0.019	<0.021	<0.018	<0.019	<0.017
Isopropylbenzene	1,900	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
m&p-Xylene	1,010	<0.009	<0.009	<0.008	<0.01	<0.01	<0.009	<0.009	<0.009
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<0.018	<0.018	<0.017	<0.019	<0.021	<0.018	<0.019	<0.017
Methylcyclohexane	NE	<0.018	<0.018	<0.017	<0.019	<0.021	<0.018	<0.019	<0.017
Methylene chloride	57	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Naphthalene	3.8	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
o-Xylene	650	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Tetrachloroethane, 1,1,2,2-	2.0	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Tetrachloroethene	24	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Toluene	4,900	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
trans-1,2-Dichloroethene	1,600	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Trichloroethene	0.94	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Trichlorofluoromethane	23,000	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004
Vinyl Chloride	0.059	<0.005	<0.004	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-66	ESB-67	ESB-68	ESB-69	ESB-69	ESB-70	ESB-71	ESB-72
Depth (feet)		27.5-28.5	9-10	8.5-9.5	13-14	28-29	30-31	4-5	37-37.5
Sample Date		08/14/2007		08/15/2007			08/15/2007		08/28/2007
VOCs	(mg/kg)								
Acetone	61,000	<0.017	0.11	0.015 J	0.027	<0.02	<1.0	<0.84	<1.7
Benzene	1.2	<0.004	<0.005	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Butanone, 2- (MEK)	27,000	<0.017	<0.02	<0.018	<0.024	<0.02	<1.0	<0.84	<1.7
Carbon Disulfide	770	<0.010	<0.01	<0.009	<0.012	<0.01	<0.52	<0.42	<0.87
Carbon tetrachloride	0.65	<0.004	<0.005	<0.005	0.005 J	<0.005	<0.26	<0.21	<0.43
Chlorobenzene	280	<0.004	0.005 J	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Chloroform	0.32	<0.004	0.12	0.004 J	0.072	<0.005	<0.26	<0.21	<0.43
cis-1,2-Dichloroethene	160	<0.004	11	0.75	1.0	0.017	<0.26	<0.21	0.3 J
Cyclohexane	6,500	<0.017	<0.02	<0.018	<0.024	<0.02	<1.0	<0.84	<1.7
Dichlorobenzene, 1,2-	1,800	<0.004	0.003 J	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Dichlorobenzene,1,3-	NE	<0.004	0.004 J	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Dichloroethene, 1,1-	230	<0.004	0.012	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Ethylbenzene	5.8	0.005 J	<0.005	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Hexanone, 2-(MBK)	200	<0.017	<0.02	<0.018	<0.024	<0.02	<1.0	<0.84	<1.7
Isopropylbenzene	1,900	<0.004	<0.005	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
m&p-Xylene	1,010	0.014 J	<0.01	<0.009	<0.012	<0.01	<0.52	<0.42	<0.87
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<0.017	<0.02	<0.018	<0.024	<0.02	<1.0	<0.84	<1.7
Methylcyclohexane	NE	<0.017	<0.02	<0.018	<0.024	<0.02	<1.0	<0.84	<1.7
Methylene chloride	57	<0.004	0.042	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Naphthalene	3.8	0.002 J	0.005 J	<0.005	0.045	<0.005	3.6	<0.21	0.24 J
o-Xylene	650	0.009 J	<0.005	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Tetrachloroethane, 1,1,2,2-	2.0	<0.004	0.017	<0.005	200 J	0.024	17	3.3	9.1
Tetrachloroethene	24	<0.004	210 J	16	<0.006	<0.005	<0.26	<0.21	<0.43
Toluene	4,900	0.033 J	0.004 J	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
trans-1,2-Dichloroethene	1,600	<0.004	0.17	0.011	<0.006	<0.005	<0.26	<0.21	<0.43
Trichloroethene	0.94	<0.004	9.6	0.67	3.1	0.006	<0.26	0.25	0.58
Trichlorofluoromethane	23,000	<0.004	<0.005	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43
Vinyl Chloride	0.059	<0.004	0.15	<0.005	<0.006	<0.005	<0.26	<0.21	<0.43

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-73	ESB-73	ESB-74	ESB-74	ESB-74	ESB-75	ESB-75	ESB-76
Depth (feet)		3-4	18-19	4-5	17-18	25-26	4-5	27-28	6-7
Sample Date		08/28/2007							
VOCs	(mg/kg)								
Acetone	61,000	<1.7	<3.3	<1.8	<1,100	<1.7	<0.019	<1.7	<2.2
Benzene	1.2	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Butanone, 2- (MEK)	27,000	<1.7	<3.3	<1.8	<1,100	<1.7	<0.019	<1.7	<2.2
Carbon Disulfide	770	<0.85	<1.7	<0.88	<550	<0.86	<0.01	<0.84	<1.1
Carbon tetrachloride	0.65	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Chlorobenzene	280	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Chloroform	0.32	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
cis-1,2-Dichloroethene	160	1.6	<0.84	2	<270	1.3	<0.005	0.42	<0.56
Cyclohexane	6,500	<1.7	<3.3	<1.8	<1,100	<1.7	<0.019	<1.7	<2.2
Dichlorobenzene, 1,2-	1,800	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Dichlorobenzene,1,3-	NE	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Dichloroethene, 1,1-	230	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Ethylbenzene	5.8	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Hexanone, 2-(MBK)	200	<1.7	<3.3	<1.8	<1,100	<1.7	<0.019	<1.7	<2.2
Isopropylbenzene	1,900	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
m&p-Xylene	1,010	<0.85	<1.7	<0.88	<550	<0.86	<0.01	<0.84	<1.1
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<1.7	<3.3	<1.8	<1,100	<1.7	<0.019	<1.7	<2.2
Methylcyclohexane	NE	<1.7	<3.3	<1.8	<1,100	<1.7	<0.019	<1.7	<2.2
Methylene chloride	57	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Naphthalene	3.8	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
o-Xylene	650	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Tetrachloroethane, 1,1,2,2-	2.0	51	48	17	5,200	0.36 J	<0.005	<0.42	6.3
Tetrachloroethene	24	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Toluene	4,900	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
trans-1,2-Dichloroethene	1,600	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Trichloroethene	0.94	4.2	1.3	3	<270	<0.43	<0.005	<0.42	<0.56
Trichlorofluoromethane	23,000	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	<0.56
Vinyl Chloride	0.059	<0.43	<0.84	<0.44	<270	<0.43	<0.005	<0.42	0.46

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-76	ESB-76DUP	ESB-78	ESB-79	ESB-80	ESB-81	ESB-82	ESB-83
Depth (feet)		20-21	20-21	65-65.3	5-6	15-15.5	2-3	16-17	14-15
Sample Date		08/28/2007		09/02/2008	09/04/08	09/04/2008			
VOCs	(mg/kg)								
Acetone	61,000	<1.8	0.011 J	<0.021 UL	<0.019 UL	<0.021 UL	<0.019 UL	0.016 L	0.44 L
Benzene	1.2	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Butanone, 2- (MEK)	27,000	<1.8	<0.017	<0.021 UL	<0.019 UL	<0.021 UL	<0.019 UL	<0.016 UL	<0.048 UJ
Carbon Disulfide	770	<0.920	<0.009	<0.01	<0.01	<0.01	<0.01	<0.008	0.031 J
Carbon tetrachloride	0.65	<0.460	<0.004	<0.005	0.003 J	0.022	<0.005	<0.004	<0.012 UJ
Chlorobenzene	280	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Chloroform	0.32	<0.460	<0.004	<0.005	<0.005	0.024	0.002 J	0.17	<0.012 UJ
cis-1,2-Dichloroethene	160	<0.460	0.003 J	0.21	<0.005	0.037	0.26	8.6 K	330 K
Cyclohexane	6,500	<1.8	<0.017	<0.021	<0.019	<0.021	<0.019	<0.016	<0.048 UJ
Dichlorobenzene, 1,2-	1,800	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Dichlorobenzene,1,3-	NE	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Dichloroethene, 1,1-	230	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Ethylbenzene	5.8	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Hexanone, 2-(MBK)	200	<1.8	<0.017	<0.021	<0.019 UL	<0.021 UL	<0.019 UL	<0.016 UL	<0.048 UJ
Isopropylbenzene	1,900	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
m&p-Xylene	1,010	<0.920	<0.009	<0.01	<0.005	<0.01	<0.01	<0.008	<0.024 UJ
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<1.8	<0.017	<0.021 UL	<0.019 UL	<0.021 UL	<0.019 UL	<0.016 UL	<0.048 UJ
Methylcyclohexane	NE	<1.8	<0.017	<0.021	<0.019	<0.021	<0.019	<0.016	<0.048 UJ
Methylene chloride	57	<0.460	<0.004	0.002	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Naphthalene	3.8	<0.460	0.003 J	0.01	<0.005 UL	<0.005 UL	<0.005 UL	0.003 L	0.022 L
o-Xylene	650	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Tetrachloroethane, 1,1,2,2-	2.0	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	0.097 J
Tetrachloroethene	24	0.490 J	0.190	5.2	3.4 K	69 K	170 K	130 K	1,600 K
Toluene	4,900	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	0.012 L	0.022 J
trans-1,2-Dichloroethene	1,600	<0.460	<0.004	0.017	<0.005	<0.005	0.005 J	<0.004	2.8 K
Trichloroethene	0.94	<0.460	0.011	0.72 J	0.013 J	0.24 J	0.25 J	11 K	94 K
Trichlorofluoromethane	23,000	<0.460	<0.004	<0.005	<0.005	<0.005	<0.005	<0.004	<0.012 UJ
Vinyl Chloride	0.059	<0.460	<0.004	0.015	<0.005	<0.005	<0.005	0.072	7.2 K

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-84	ESB-87	ESB-88	ESB-88 Dup	ESB-89	ESB-89A	ESB-90	ESB-93
Depth (feet)		6-6.5	12-13	14-15	14-15	12-13	12-13	8-9	14-15
Sample Date		09/04/2008				10/22/2013			
VOCs	(mg/kg)								
Acetone	61,000	0.013 L	0.053 L	<0.019 UJ	<0.019 UJ				
Benzene	1.2	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Butanone, 2- (MEK)	27,000	0.160 L	<0.019 UL	<0.019 UJ	<0.019 UJ				
Carbon Disulfide	770	0.009 L	<0.009	<0.009 UJ	<0.009 UJ				
Carbon tetrachloride	0.65	<0.005	<0.005	<0.005 UJ	<0.005 UJ				
Chlorobenzene	280	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Chloroform	0.32	<0.005 UL	0.004 J	<0.005 UJ	<0.005 UJ				
cis-1,2-Dichloroethene	160	3.4 K	0.11	0.004 J	0.003 J				
Cyclohexane	6,500	<0.019 UL	<0.019	<0.019 UJ	<0.019 UJ				
Dichlorobenzene, 1,2-	1,800	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Dichlorobenzene,1,3-	NE	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Dichloroethene, 1,1-	230	0.003 J	<0.019	<0.019 UJ	<0.019 UJ				
Ethylbenzene	5.8	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Hexanone, 2-(MBK)	200	<0.019 UL	<0.019 UL	<0.019 UJ	<0.019 UJ				
Isopropylbenzene	1,900	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
m&p-Xylene	1,010	<0.009 UL	<0.009	<0.009 UJ	<0.009 UJ				
Methyl, 4-Pentanone, -2- (MIBK)	33,000	<0.019 UL	<0.019 UL	<0.019 UJ	<0.019 UJ				
Methylcyclohexane	NE	<0.019 UL	<0.019	<0.019 UJ	<0.019 UJ				
Methylene chloride	57	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Naphthalene	3.8	<0.005 UL	<0.005 UL	<0.005 UJ	<0.005 UJ				
o-Xylene	650	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Tetrachloroethane, 1,1,2,2-	2.0	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
Tetrachloroethene	24	2.4 K	18 K	0.006 J	0.005 J	6,300	4,300	<0.0041	0.004 J
Toluene	4,900	<0.005 UL	<0.005	<0.005 UJ	<0.005 UJ				
trans-1,2-Dichloroethene	1,600	0.031 L	<0.005	<0.005 UJ	<0.005 UJ				
Trichloroethene	0.94	0.29	0.22 J	0.005 J	0.003 J	130	76	<0.0041	<0.061
Trichlorofluoromethane	23,000	<0.005	<0.005	<0.005	<0.005				
Vinyl Chloride	0.059	0.2	<0.005	0.025 J	0.021 J				

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	USB-1	USB-2	USB-3	USB-4	USB-5	USB-6	USB-7	USB-8
Depth (feet)		18-20	26-28	4-6	28-30	14-16	28-30	4-6	24-26
Sample Date		09/12/2013				09/13/2013		09/12/2013	
VOCs	(mg/kg)								
Acetone	61,000								
Benzene	1.2								
Butanone, 2- (MEK)	27,000								
Carbon Disulfide	770								
Carbon tetrachloride	0.65								
Chlorobenzene	280								
Chloroform	0.32								
cis-1,2-Dichloroethene	160	170	<0.004	<0.540	0.096	<0.005	210	0.7	0.029
Cyclohexane	6,500								
Dichlorobenzene, 1,2-	1,800								
Dichlorobenzene,1,3-	NE								
Dichloroethene, 1,1-	230								
Ethylbenzene	5.8								
Hexanone, 2-(MBK)	200								
Isopropylbenzene	1,900								
m&p-Xylene	1,010								
Methyl, 4-Pentanone, -2- (MIBK)	33,000								
Methylcyclohexane	NE								
Methylene chloride	57								
Naphthalene	3.8								
o-Xylene	650								
Tetrachloroethane, 1,1,2,2-	2.0								
Tetrachloroethene	24	45	0.014	16	0.01	0.02	13,000	5.6	0.018
Toluene	4,900								
trans-1,2-Dichloroethene	1,600								
Trichloroethene	0.94	280	<0.004	0.75	<0.004	<0.005	160	0.59	<0.005
Trichlorofluoromethane	23,000								
Vinyl Chloride	0.059	<6.3	<0.004	<0.540	0.2	<0.005	<89.0	<0.440	0.39

Table 2B
VOC Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	USB-9	USB-10	USB-11	USB-12	USB-13
Depth (feet)		8-10	8-10	0-2	10-12	16-18
Sample Date		03/12/2013				
VOCs	(mg/kg)					
Acetone	61,000					
Benzene	1.2					
Butanone, 2- (MEK)	27,000					
Carbon Disulfide	770					
Carbon tetrachloride	0.65					
Chlorobenzene	280					
Chloroform	0.32					
cis-1,2-Dichloroethene	160	0.72	<0.490	<0.520	<0.006	<0.029
Cyclohexane	6,500					
Dichlorobenzene, 1,2-	1,800					
Dichlorobenzene,1,3-	NE					
Dichloroethene, 1,1-	230					
Ethylbenzene	5.8					
Hexanone, 2-(MBK)	200					
Isopropylbenzene	1,900					
m&p-Xylene	1,010					
Methyl, 4-Pentanone, -2- (MIBK)	33,000					
Methylcyclohexane	NE					
Methylene chloride	57					
Naphthalene	3.8					
o-Xylene	650					
Tetrachloroethane, 1,1,2,2-	2.0					
Tetrachloroethene	24	4.6	19	3.5	0.026	0.29
Toluene	4,900					
trans-1,2-Dichloroethene	1,600					
Trichloroethene	0.94	<0.580	<0.490	<0.520	<0.006	<0.029
Trichlorofluoromethane	23,000					
Vinyl Chloride	0.059	<0.580	<0.490	<0.520	<0.006	<0.029

Table 3A
SVOC and PCB Soil Characterization Summary
2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-1	GTA-SB-1	GTA-SB-2	GTA-SB-2	GTA-SB-3	GTA-SB-3	GTA-SB-4	GTA-SB-4	GTA-SB-5	GTA-SB-5	GTA-SB-6	GTA-SB-6	GTA-SB-7	GTA-SB-7	GTA-SB-8	GTA-SB-8
Depth (feet)		0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5
Sample Date		11/17/2014															
SVOCs	**(mg/kg)**																
2,4,5-Trichlorophenol	6,300	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2,4,6-Trichlorophenol	49	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2,4-Dichlorophenol	190	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2,4-Dimethylphenol	1,300	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2,4-Dinitrophenol	130	<0.36	<0.40	<0.37	<0.39	<0.40	<0.37	<0.39	<0.40	<0.40	<0.41	<0.40	<0.38	<0.39	<0.41	<0.40	<0.41
2,4-Dinitrotoluene	1.70	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2,6-Dinitrotoluene	0.36	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2-Chloronaphthalene	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2-Chlorophenol	390	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2-Methyl phenol	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2-Methylnaphthalene	240	<0.18	<0.20	<0.19	0.24	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2-Nitroaniline	630	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
2-Nitrophenol	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
3&4-Methylphenol	63	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
3,3-Dichlorobenzidine	1.2	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
3-Nitroaniline	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
4,6-Dinitro-2-methyl phenol	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
4-Bromophenylphenyl ether	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
4-Chloro-3-methyl phenol	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
4-Chloroaniline	2.7	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
4-Chlorophenyl Phenyl ether	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
4-Nitroaniline	27	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
4-Nitrophenol	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Acenaphthene	3,600	<0.18	<0.20	<0.19	1.3	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Acenaphthylene	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Acetophenone	7,800	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Anthracene	18,000	<0.18	<0.20	<0.19	2.7	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Atrazine	2.4	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Benzo(a)anthracene	1.1	<0.18	<0.20	<0.19	5.8	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Benzo(a)pyrene	0.11	<0.18	<0.20	<0.19	5.0	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Benzo(b)fluoranthene	1.1	<0.18	<0.20	<0.19	4.4	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Benzo(g,h,i)perylene	NE	<0.18	<0.20	<0.19	2.5	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Benzo(k)fluoranthene	11	<0.18	<0.20	<0.19	4.6	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Biphenyl (Diphenyl)	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Butyl benzyl phthalate	290	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Caprolactam	31,000	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Carbazole	NE	<0.18	<0.20	<0.19	4.5	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Chrysene	110	<0.18	<0.20	<0.19	5.8	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Di-n-butyl phthalate	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Di-n-octyl phthalate	630	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Dibenz(a,h)Anthracene	0.11	<0.18	<0.20	<0.19	1.1	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Dibenzofuran	73	<0.18	<0.20	<0.19	0.8	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Diethyl phthalate	51,000	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Dimethyl phthalate	7,800	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Fluoranthene	2,400	<0.18	<0.20	<0.19	12	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Fluorene	2,400	<0.18	<0.20	<0.19	1.4	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Hexachlorobenzene	0.21	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Hexachlorobutadiene	1.2	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Hexachlorocyclopentadiene	1.8	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Hexachloroethane	1.8	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Indeno(1,2,3-c,d)Pyrene	1.1	<0.18	<0.20	<0.19	2.6	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Isophorone	570	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
N-Nitrosodi-n-propyl amine	0.078	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
N-Nitrosodiphenylamine	110	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Naphthalene	3.8	<0.18	<0.20	<0.19	0.36	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Nitrobenzene	5.1	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Pentachlorophenol	1.0	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Phenanthrene	NE	<0.18	<0.20	<0.19	11	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Phenol	19,000	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Pyrene	1,800	<0.18	<0.20	<0.19	11	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
Pyridine	78	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
bis(2-chloroethoxy) methane	190	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
bis(2-chloroethyl) ether	0.23	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
bis(2-chloroisopropyl) ether	NE	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
bis(2-ethylhexyl) phthalate	39	<0.18	<0.20	<0.19	<0.19	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.20	<0.20	<0.20	<0.20
PCBs	**(mg/kg)**																
PCB-1016	4.1																
PCB-1221	0.2																
PCB-1232	0.17																
PCB-1242	0.23																
PCB-1248	0.23																
PCB-1254	0.24																
PCB-1260	0.24																

Table 3A
SVOC and PCB Soil Characterization Summary
2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-9	GTA-SB-9	GTA-SB-10	GTA-SB-10	GTA-SB-11	GTA-SB-11	GTA-SB-12	GTA-SB-12	GTA-SB-13	GTA-SB-13	GTA-SB-14	GTA-SB-14	GTA-SB-15	GTA-SB-15	GTA-SB-16	GTA-SB-16
Depth (feet)		0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5
Sample Date		11/17/2014															
SVOCs	**(mg/kg)**																
2,4,5-Trichlorophenol	6,300	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2,4,6-Trichlorophenol	49	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2,4-Dichlorophenol	190	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2,4-Dimethylphenol	1,300	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2,4-Dinitrophenol	130	<0.37	<0.38	<0.360	<0.39	<0.40	<0.39	<0.39	<0.39	<0.40	<0.41	<0.40	<0.39	<0.41	<0.41	<0.41	<0.40
2,4-Dinitrotoluene	1.70	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2,6-Dinitrotoluene	0.36	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2-Chloronaphthalene	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2-Chlorophenol	390	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2-Methyl phenol	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2-Methylnaphthalene	240	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2-Nitroaniline	630	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
2-Nitrophenol	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
3&4-Methylphenol	63	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
3,3-Dichlorobenzidine	1.2	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
3-Nitroaniline	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
4,6-Dinitro-2-methyl phenol	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
4-Bromophenylphenyl ether	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
4-Chloro-3-methyl phenol	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
4-Chloroaniline	2.7	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
4-Chlorophenyl Phenyl ether	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
4-Nitroaniline	27	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
4-Nitrophenol	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Acenaphthene	3,600	<0.19	<0.19	<0.180	<0.20	0.320	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Acenaphthylene	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Acetophenone	7,800	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Anthracene	18,000	0.33	<0.19	<0.180	<0.20	0.940	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Atrazine	2.4	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Benzo(a)anthracene	1.1	1.6	0.530	<0.180	<0.20	2.6	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Benzo(a)pyrene	0.11	1.5	0.470	<0.180	<0.20	2.2	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Benzo(b)fluoranthene	1.1	1.5	0.480	<0.180	<0.20	2.4	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Benzo(g,h,i)perylene	NE	0.880	0.260	<0.180	<0.20	1.0	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Benzo(k)fluoranthene	11	1.1	0.460	<0.180	<0.20	1.8	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Biphenyl (Diphenyl)	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Butyl benzyl phthalate	290	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Caprolactam	31,000	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Carbazole	NE	<0.19	<0.19	<0.180	<0.20	0.330	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Chrysene	110	1.7	0.560	<0.180	<0.20	2.7	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Di-n-butyl phthalate	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Di-n-octyl phthalate	630	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Dibenz(a,h)Anthracene	0.11	<0.19	<0.19	<0.180	<0.20	0.440	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Dibenzofuran	73	<0.19	<0.19	<0.180	<0.20	0.230	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Diethyl phthalate	51,000	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Dimethyl phthalate	7,800	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Fluoranthene	2,400	2.3	0.910	<0.180	<0.20	4.7	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Fluorene	2,400	<0.19	<0.19	<0.180	<0.20	0.410	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Hexachlorobenzene	0.21	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Hexachlorobutadiene	1.2	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Hexachlorocyclopentadiene	1.8	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Hexachloroethane	1.8	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Indeno(1,2,3-c,d)Pyrene	1.1	1.1	0.300	<0.180	<0.20	1.2	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Isophorone	570	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
N-Nitrosodi-n-propyl amine	0.078	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
N-Nitrosodiphenylamine	110	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Naphthalene	3.8	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Nitrobenzene	5.1	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Pentachlorophenol	1.0	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Phenanthrene	NE	1.4	0.540	<0.180	<0.20	3.3	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Phenol	19,000	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Pyrene	1,800	2.2	0.860	<0.180	<0.20	3.9	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
Pyridine	78	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
bis(2-chloroethoxy) methane	190	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
bis(2-chloroethyl) ether	0.23	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
bis(2-chloroisopropyl) ether	NE	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
bis(2-ethylhexyl) phthalate	39	<0.19	<0.19	<0.180	<0.20	<0.20	<0.19	<0.19	<0.20	<0.20	<0.21	<0.20	<0.19	<0.21	<0.21	<0.21	<0.20
PCBs	**(mg/kg)**																
PCB-1016	4.1			<0.054	<0.058												<0.060
PCB-1221	0.2			<0.054	<0.058												<0.060
PCB-1232	0.17			<0.054	<0.058												<0.060
PCB-1242	0.23			<0.054	<0.058												<0.060
PCB-1248	0.23			<0.054	<0.058												<0.060
PCB-1254	0.24			<0.054	<0.058												<0.060
PCB-1260	0.24			<0.054	<0.058												<0.060

Table 3A
SVOC and PCB Soil Characterization Summary
2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-17	GTA-SB-17	GTA-SB-18	GTA-SB-18	GTA-SB-23	GTA-SB-23	GTA-SB-24	GTA-SB-24	GTA-SB-25	GTA-SB-25	GTA-SB-26	GTA-SB-26	GTA-SB-27	GTA-SB-27	GTA-SB-28	GTA-SB-28
Depth (feet)		0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5
Sample Date		11/17/2014				11/18/2014											
SVOCs	**(mg/kg)**																
2,4,5-Trichlorophenol	6,300	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2,4,6-Trichlorophenol	49	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2,4-Dichlorophenol	190	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2,4-Dimethylphenol	1,300	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2,4-Dinitrophenol	130	<0.41	<0.39	<0.39	<0.40	<0.37	<0.38	<0.37	<0.39	<0.39	<0.39	<420	<0.39	<430	<0.38	<0.38	<0.38
2,4-Dinitrotoluene	1.70	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2,6-Dinitrotoluene	0.36	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2-Chloronaphthalene	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2-Chlorophenol	390	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2-Methyl phenol	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2-Methylnaphthalene	240	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2-Nitroaniline	630	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
2-Nitrophenol	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
3&4-Methylphenol	63	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
3,3-Dichlorobenzidine	1.2	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
3-Nitroaniline	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
4,6-Dinitro-2-methyl phenol	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
4-Bromophenylphenyl ether	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
4-Chloro-3-methyl phenol	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
4-Chloroaniline	2.7	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
4-Chlorophenyl Phenyl ether	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
4-Nitroaniline	27	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
4-Nitrophenol	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Acenaphthene	3,600	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Acenaphthylene	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Acetophenone	7,800	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Anthracene	18,000	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	0.300
Atrazine	2.4	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Benzo(a)anthracene	1.1	<0.20	<0.20	0.250	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.260	<0.22	<0.19	0.240	1.2
Benzo(a)pyrene	0.11	<0.20	<0.20	0.200	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.230	<0.22	<0.19	<0.19	1.0
Benzo(b)fluoranthene	1.1	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.210	<0.22	<0.19	<0.19	1.0
Benzo(g,h,i)perylene	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	0.640
Benzo(k)fluoranthene	11	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.220	<0.22	<0.19	0.230	0.900
Biphenyl (Diphenyl)	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Butyl benzyl phthalate	290	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Caprolactam	31,000	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Carbazole	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Chrysene	110	<0.20	<0.20	0.240	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.310	<0.22	<0.19	0.290	1.3
Di-n-butyl phthalate	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Di-n-octyl phthalate	630	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Dibenz(a,h)Anthracene	0.11	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	0.270
Dibenzofuran	73	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Diethyl phthalate	51,000	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Dimethyl phthalate	7,800	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Fluoranthene	2,400	<0.20	<0.20	0.520	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.480	<0.22	<0.19	0.390	1.7
Fluorene	2,400	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Hexachlorobenzene	0.21	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Hexachlorobutadiene	1.2	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Hexachlorocyclopentadiene	1.8	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Hexachloroethane	1.8	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Indeno(1,2,3-c,d)Pyrene	1.1	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	0.620
Isophorone	570	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
N-Nitrosodi-n-propyl amine	0.078	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
N-Nitrosodiphenylamine	110	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Naphthalene	3.8	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Nitrobenzene	5.1	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Pentachlorophenol	1.0	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Phenanthrene	NE	<0.20	<0.20	0.580	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.450	<0.22	<0.19	0.230	1.3
Phenol	19,000	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
Pyrene	1,800	<0.20	<0.20	0.470	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	0.590	<0.22	<0.19	0.520	2.4
Pyridine	78	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
bis(2-chloroethoxy) methane	190	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
bis(2-chloroethyl) ether	0.23	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
bis(2-chloroisopropyl) ether	NE	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
bis(2-ethylhexyl) phthalate	39	<0.20	<0.20	<0.19	<0.20	<0.19	<0.19	<0.19	<0.20	<0.20	<0.20	<0.21	<0.20	<0.22	<0.19	<0.19	<0.19
PCBs	**(mg/kg)**																
PCB-1016	4.1	<0.059				<0.054	<0.057										
PCB-1221	0.2	<0.059				<0.054	<0.057										
PCB-1232	0.17	<0.059				<0.054	<0.057										
PCB-1242	0.23	<0.059				<0.054	<0.057										
PCB-1248	0.23	<0.059				<0.054	<0.057										
PCB-1254	0.24	<0.059				<0.054	<0.057										
PCB-1260	0.24	<0.059				<0.054	<0.057										

Table 3A
SVOC and PCB Soil Characterization Summary
2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-29	GTA-SB-30	GTA-SB-31	GTA-SB-32	GTA-SB-33	GTA-SB-34	GTA-SB-35	GTA-SB-36	GTA-SB-37	GTA-SB-38	GTA-SB-39	GTA-SB-40	GTA-SB-41	GTA-SB-42	GTA-SB-43	GTA-SB-44
Depth (feet)		0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
Sample Date		11/18/2014															
SVOCs	**(mg/kg)**																
2,4,5-Trichlorophenol	6,300	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2,4,6-Trichlorophenol	49	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2,4-Dichlorophenol	190	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2,4-Dimethylphenol	1,300	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2,4-Dinitrophenol	130	<0.41	<0.41	<0.37	<0.41	<2.0	<0.41	<0.38	<0.38	<0.38	<0.36	<0.50	<0.39	<0.39	<0.39	<0.38	<0.38
2,4-Dinitrotoluene	1.70	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2,6-Dinitrotoluene	0.36	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2-Chloronaphthalene	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2-Chlorophenol	390	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2-Methyl phenol	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2-Methylnaphthalene	240	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2-Nitroaniline	630	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
2-Nitrophenol	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
3&4-Methylphenol	63	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
3,3-Dichlorobenzidine	1.2	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
3-Nitroaniline	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
4,6-Dinitro-2-methyl phenol	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
4-Bromophenylphenyl ether	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
4-Chloro-3-methyl phenol	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
4-Chloroaniline	2.7	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
4-Chlorophenyl Phenyl ether	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
4-Nitroaniline	27	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
4-Nitrophenol	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Acenaphthene	3,600	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Acenaphthylene	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Acetophenone	7,800	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Anthracene	18,000	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Atrazine	2.4	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Benzo(a)anthracene	1.1	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Benzo(a)pyrene	0.11	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	0.21	<0.20	<0.19
Benzo(b)fluoranthene	1.1	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Benzo(g,h,i)perylene	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Benzo(k)fluoranthene	11	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	0.2	<0.20	<0.19
Biphenyl (Diphenyl)	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Butyl benzyl phthalate	290	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Caprolactam	31,000	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Carbazole	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Chrysene	110	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	0.21	<0.20	<0.19
Di-n-butyl phthalate	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Di-n-octyl phthalate	630	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Dibenz(a,h)Anthracene	0.11	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Dibenzofuran	73	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Diethyl phthalate	51,000	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Dimethyl phthalate	7,800	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Fluoranthene	2,400	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	0.38	<0.19	<0.19	0.31	<0.20	<0.19
Fluorene	2,400	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Hexachlorobenzene	0.21	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Hexachlorobutadiene	1.2	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Hexachlorocyclopentadiene	1.8	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Hexachloroethane	1.8	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Indeno(1,2,3-c,d)Pyrene	1.1	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Isophorone	570	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
N-Nitrosodi-n-propyl amine	0.078	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
N-Nitrosodiphenylamine	110	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Naphthalene	3.8	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Nitrobenzene	5.1	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Pentachlorophenol	1.0	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Phenanthrene	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	0.19	<0.20	<0.19
Phenol	19,000	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
Pyrene	1,800	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	0.42	<0.19	<0.19	0.35	<0.20	<0.19
Pyridine	78	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
bis(2-chloroethoxy) methane	190	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
bis(2-chloroethyl) ether	0.23	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
bis(2-chloroisopropyl) ether	NE	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
bis(2-ethylhexyl) phthalate	39	<0.20	<0.20	<0.19	<0.21	<2.0	<0.20	<0.19	<0.19	<0.19	<0.18	<0.25	<0.19	<0.19	<0.19	<0.20	<0.19
PCBs	**(mg/kg)**																
PCB-1016	4.1																
PCB-1221	0.2																
PCB-1232	0.17																
PCB-1242	0.23																
PCB-1248	0.23																
PCB-1254	0.24																
PCB-1260	0.24																

Table 3A
SVOC and PCB Soil Characterization Summary
2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-45
Depth (feet)		0-2
Sample Date		11/18/2014
SVOCs	**(mg/kg)**	
2,4,5-Trichlorophenol	6,300	<0.21
2,4,6-Trichlorophenol	49	<0.21
2,4-Dichlorophenol	190	<0.21
2,4-Dimethylphenol	1,300	<0.21
2,4-Dinitrophenol	130	<0.41
2,4-Dinitrotoluene	1.70	<0.21
2,6-Dinitrotoluene	0.36	<0.21
2-Chloronaphthalene	NE	<0.21
2-Chlorophenol	390	<0.21
2-Methyl phenol	NE	<0.21
2-Methylnaphthalene	240	<0.21
2-Nitroaniline	630	<0.21
2-Nitrophenol	NE	<0.21
3&4-Methylphenol	63	<0.21
3,3-Dichlorobenzidine	1.2	<0.21
3-Nitroaniline	NE	<0.21
4,6-Dinitro-2-methyl phenol	NE	<0.21
4-Bromophenylphenyl ether	NE	<0.21
4-Chloro-3-methyl phenol	NE	<0.21
4-Chloroaniline	2.7	<0.21
4-Chlorophenyl Phenyl ether	NE	<0.21
4-Nitroaniline	27	<0.21
4-Nitrophenol	NE	<0.21
Acenaphthene	3,600	<0.21
Acenaphthylene	NE	<0.21
Acetophenone	7,800	<0.21
Anthracene	18,000	<0.21
Atrazine	2.4	<0.21
Benzo(a)anthracene	1.1	<0.21
Benzo(a)pyrene	0.11	<0.21
Benzo(b)fluoranthene	1.1	<0.21
Benzo(g,h,i)perylene	NE	<0.21
Benzo(k)fluoranthene	11	<0.21
Biphenyl (Diphenyl)	NE	<0.21
Butyl benzyl phthalate	290	<0.21
Caprolactam	31,000	<0.21
Carbazole	NE	<0.21
Chrysene	110	<0.21
Di-n-butyl phthalate	NE	<0.21
Di-n-octyl phthalate	630	<0.21
Dibenz(a,h)Anthracene	0.11	<0.21
Dibenzofuran	73	<0.21
Diethyl phthalate	51,000	<0.21
Dimethyl phthalate	7,800	<0.21
Fluoranthene	2,400	<0.21
Fluorene	2,400	<0.21
Hexachlorobenzene	0.21	<0.21
Hexachlorobutadiene	1.2	<0.21
Hexachlorocyclopentadiene	1.8	<0.21
Hexachloroethane	1.8	<0.21
Indeno(1,2,3-c,d)Pyrene	1.1	<0.21
Isophorone	570	<0.21
N-Nitrosodi-n-propyl amine	0.078	<0.21
N-Nitrosodiphenylamine	110	<0.21
Naphthalene	3.8	<0.21
Nitrobenzene	5.1	<0.21
Pentachlorophenol	1.0	<0.21
Phenanthrene	NE	<0.21
Phenol	19,000	<0.21
Pyrene	1,800	<0.21
Pyridine	78	<0.21
bis(2-chloroethoxy) methane	190	<0.21
bis(2-chloroethyl) ether	0.23	<0.21
bis(2-chloroisopropyl) ether	NE	<0.21
bis(2-ethylhexyl) phthalate	39	<0.21
PCBs	**(mg/kg)**	
PCB-1016	4.1	
PCB-1221	0.2	
PCB-1232	0.17	
PCB-1242	0.23	
PCB-1248	0.23	
PCB-1254	0.24	
PCB-1260	0.24	

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-2	ESB-2	ESB-6	ESB-6	ESB-7	ESB-8	ESB-8 Dup	ESB-10
Depth (feet)		0-0.5	4-5	0-0.5	4-5	4-5	5-6	5-6	4-5
Sample Date		12/13/2006		12/15/2006		12/13/2006	12/07/2006		12/06/2006
SVOCs	(mg/kg)								
1-1-Biphenyl	NE	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	
2-Methylnaphthalene	240	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Acenaphthene	3,600	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Acenaphthylene	NE	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Anthracene	18,000	< 0.39	< 0.36	< 0.2	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Benzo(a)anthracene	1.1	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Benzo(a)pyrene	0.11	< 0.2	<0.18	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.22
Benzo(b)fluoranthene	1.1	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Benzo(g,h,i)perylene	NE	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Benzo(k)fluoranthene	11	< 0.39	< 0.36	< 0.41	< 0.39	0.043 J	< 0.4	< 0.41	< 0.43
bis(2-chloroisopropyl) ether	NE	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	
bis(2-ethylhexyl) phthalate	39	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	
Carbazole	NE	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	
Chrysene	110	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Dibenz(a,h)Anthracene	0.11	< 0.2	<0.18	< 0.2	< 0.2	< 0.2	< 0.2	< 0.4	< 0.22
Dibenzofuran	73	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	
Di-n-butyl phthalate	NE	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	
Fluoranthene	2,400	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Fluorene	2,400	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Hexachloroethane	1.8	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	
Indeno(1,2,3-c,d)Pyrene	1.1	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Naphthalene	3.8	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Phenanthrene	NE	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
Pyrene	1,800	< 0.39	< 0.36	< 0.41	< 0.39	< 0.4	< 0.4	< 0.41	< 0.43
PCBs									
PCB-1016	4.1								
PCB-1221	0.2								
PCB-1232	0.17								
PCB-1242	0.23								
PCB-1248	0.23								
PCB-1254	0.24								
PCB-1260	0.24								

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-13	ESB-16	ESB-17	ESB-21	ESB-21	ESB-22	ESB-22	ESB-26
Depth (feet)		4-5	3-4	0-0.5	0-0.5	4-5	0-0.5	4-5	0-0.5
Sample Date		12/06/2006	12/13/2006	12/08/2006	12/07/2006		12/12/2006		12/12/2006
SVOCs	(mg/kg)								
1-1-Biphenyl	NE		< 0.39	< 0.38			< 0.39	< 0.4	
2-Methylnaphthalene	240	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Acenaphthene	3,600	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Acenaphthylene	NE	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Anthracene	18,000	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Benzo(a)anthracene	1.1	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4 J
Benzo(a)pyrene	0.11	< 0.2	< 0.2	< 1.9	< 1.9	< 1.9	< 0.2	< 0.2	< 0.2 J
Benzo(b)fluoranthene	1.1	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4 J
Benzo(g,h,i)perylene	NE	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4 J
Benzo(k)fluoranthene	11	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4 J
bis(2-chloroisopropyl) ether	NE		< 0.39	< 0.38			< 0.39	< 0.4	
bis(2-ethylhexyl) phthalate	39		< 0.39	< 0.38			< 0.39	< 0.4	
Carbazole	NE		< 0.39	< 0.38			< 0.39	< 0.4	
Chrysene	110	< 0.4	< 0.4	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Dibenz(a,h)Anthracene	0.11	< 0.2	< 0.2	< 0.38	< 1.9	< 1.9	< 0.2	< 0.2	< 0.2 J
Dibenzofuran	73		< 0.39	< 0.38			< 0.39	< 0.4	
Di-n-butyl phthalate	NE		< 0.39	< 0.38			< 0.39	< 0.4	
Fluoranthene	2,400	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4 J
Fluorene	2,400	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4 J
Hexachloroethane	1.8		< 0.39	< 0.38			< 0.39	< 0.4	
Indeno(1,2,3-c,d)Pyrene	1.1	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Naphthalene	3.8	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Phenanthrene	NE	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
Pyrene	1,800	< 0.39	< 0.39	< 0.38	< 0.38	< 0.37	< 0.39	< 0.4	< 0.4
PCBs									
PCB-1016	4.1								
PCB-1221	0.2								
PCB-1232	0.17								
PCB-1242	0.23								
PCB-1248	0.23								
PCB-1254	0.24								
PCB-1260	0.24								

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-34	ESB-34	ESB-42B	ESB-44	ESB-44	ESB-45	ESB-46	ESB-47
Depth (feet)		0-0.5	4-5	14-15	0-0.5	4-5	0-0.5	0-0.5	10-11
Sample Date		12/12/2006	12/13/2006		12/12/2006	12/26/2006	12/07/2006		12/08/2006
SVOCs	(mg/kg)								
1-1-Biphenyl	NE	< 0.37	< 0.37		< 0.38	< 0.37	< 0.38	< 0.38	
2-Methylnaphthalene	240	< 0.37	< 0.37	< 0.4	< 0.38	0.370 J	< 0.38	< 0.38	< 0.43
Acenaphthene	3,600	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	< 0.38	< 0.38	< 0.43
Acenaphthylene	NE	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	< 0.38	< 0.38	< 0.43
Anthracene	18,000	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	< 0.38	< 0.38	< 0.22
Benzo(a)anthracene	1.1	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	0.190 J	< 0.38	< 0.43
Benzo(a)pyrene	0.11	< 0.19	< 0.18	< 0.2	< 0.19	< 0.19	0.230	< 0.19	< 0.22
Benzo(b)fluoranthene	1.1	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	0.280 J	< 0.38	< 0.43
Benzo(g,h,i)perylene	NE	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	0.180 J	< 0.38	< 0.43
Benzo(k)fluoranthene	11	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	0.160 J	< 0.38	< 0.43
bis(2-chloroisopropyl) ether	NE	< 0.37	< 0.37		< 0.38	< 0.37	< 0.38	< 0.38	
bis(2-ethylhexyl) phthalate	39	< 0.37	< 0.37		< 0.38	< 0.37	< 0.38	< 0.38	
Carbazole	NE	< 0.37	< 0.37		< 0.38	< 0.37	< 0.38	< 0.38	
Chrysene	110	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	0.220 J	< 0.38	< 0.43
Dibenz(a,h)Anthracene	0.11	< 0.19	< 0.18	< 0.2	< 0.19	< 0.19	0.054 J	< 0.19	< 0.22
Dibenzofuran	73	< 0.37	< 0.37		< 0.38	< 0.37	< 0.38	< 0.38	
Di-n-butyl phthalate	NE	< 0.37	< 0.37		< 0.38	< 0.37	< 0.38	< 0.38	
Fluoranthene	2,400	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	0.330 J	< 0.38	< 0.43
Fluorene	2,400	< 0.37	< 0.37	< 0.4	< 0.38	0.110 J	< 0.38	< 0.38	< 0.43
Hexachloroethane	1.8	< 0.37	< 0.37		< 0.38	< 0.37	1.50	< 0.38	
Indeno(1,2,3-c,d)Pyrene	1.1	< 0.37	< 0.37	< 0.4	< 0.38	< 0.37	0.15 J	< 0.38	< 0.43
Naphthalene	3.8	< 0.37	< 0.37	0.096 J	< 0.38	0.075 J	< 0.38	< 0.38	< 0.43
Phenanthrene	NE	< 0.37	< 0.37	< 0.4	< 0.38	0.220J	0.16 J	< 0.38	< 0.43
Pyrene	1,800	< 0.37	< 0.37	< 0.4	< 0.38	0.051 J	0.39	< 0.38	< 0.43
PCBs									
PCB-1016	4.1								
PCB-1221	0.2								
PCB-1232	0.17								
PCB-1242	0.23								
PCB-1248	0.23								
PCB-1254	0.24								
PCB-1260	0.24								

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-49	ESB-53B	ESB-54	ESB-54	ESB-54 Dup	ESB-56	ESB-56	ESB-57
Depth (feet)		4-5	11-12	0-0.5	3-3.5	3-3.5	0-0.5	2-3	0-0.5
Sample Date		12/07/2006	12/12/2006	01/07/2018				01/18/2007	
SVOCs	(mg/kg)								
1-1-Biphenyl	NE	< 0.39							
2-Methylnaphthalene	240	< 0.39	< 0.38	< 0.37	.070 J	< 0.42	< 0.37	< 0.39	
Acenaphthene	3,600	< 0.39	< 0.38	< 0.37	0.320 J	< 0.42	0.042 J	< 0.39	
Acenaphthylene	NE	< 0.39	< 0.38	< 0.37	<0.410	< 0.42	<0.370	< 0.39 J	
Anthracene	18,000	< 0.39	< 0.19	< 0.37	0.460 J	< 0.42	<0.370	<0.19 J	
Benzo(a)anthracene	1.1	< 0.39	< 0.38	< 0.37 J	1.3 J	< 0.42	0.130 J	< 0.39 J	
Benzo(a)pyrene	0.11	< 0.19	< 0.19	< 0.19 J	1.6 J	0.044 J	0.130 J	<0.19 J	
Benzo(b)fluoranthene	1.1	0.039 J	< 0.38	< 0.37 J	1.4 J	< 0.42	0.110 J	< 0.39 J	
Benzo(g,h,i)perylene	NE	< 0.39	< 0.38	< 0.37 J	1.0 J	< 0.42	0.061 J	< 0.39	
Benzo(k)fluoranthene	11	0.046 J	< 0.38	< 0.37 J	1.3 J	< 0.42	0.130 J	< 0.39	
bis(2-chloroisopropyl) ether	NE	< 0.39						< 0.39 J	
bis(2-ethylhexyl) phthalate	39	< 0.39						< 0.39	
Carbazole	NE	0.048 J						< 0.39 J	
Chrysene	110	< 0.19	< 0.19	< 0.19	1.3 J	< 0.21	0.130 J	< 0.39 J	
Dibenz(a,h)Anthracene	0.11	< 0.19	< 0.19	< 0.19	0.310 J	< 0.21		< 0.39 J	
Dibenzofuran	73	0.075 J						< 0.39	
Di-n-butyl phthalate	NE	< 0.39						< 0.39	
Fluoranthene	2,400	< 0.39			2.3 J	0.066 J	0.270 J	< 0.39	
Fluorene	2,400	< 0.39	< 0.38	< 0.37	0.240 J	< 0.42	<0.370	< 0.39 J	
Hexachloroethane	1.8	< 0.39						< 0.39	
Indeno(1,2,3-c,d)Pyrene	1.1	< 0.39	< 0.38	< 0.37	0.930 J	< 0.42 J	0.060 J	< 0.39	
Naphthalene	3.8	< 0.39	< 0.38	< 0.37	0.240 J	0.042 J	<0.370	< 0.39	
Phenanthrene	NE	0.043 J	< 0.38	< 0.37	1.7 J	0.080 J	0.140 J	< 0.39 J	
Pyrene	1,800	0.074 J	< 0.38	< 0.37	2.0 J		0.260 J		
PCBs									
PCB-1016	4.1								<0.029
PCB-1221	0.2								<0.029
PCB-1232	0.17								<0.029
PCB-1242	0.23								<0.029
PCB-1248	0.23								<0.029
PCB-1254	0.24								<0.029
PCB-1260	0.24								<0.029

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-58	ESB-58 DUP	ESB-94	ESB-95 MS/MSD	ESB-96	ESB-97	ESB-100	ESB-101
Depth (feet)		0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
Sample Date		08/07/2007		10/21/2013					
SVOCs	(mg/kg)								
1-1-Biphenyl	NE								
2-Methylnaphthalene	240			<0.039	0.260	<0.0037	<0.0041	0.06	0.140
Acenaphthene	3,600			0.120	0.980	<0.0037	<0.0041	0.43	0.540
Acenaphthylene	NE			<0.039	0.039	<0.0037	<0.0041	0.056	<0.040
Anthracene	18,000			0.250	1.8	<0.0037	0.0073	1.1	0.990
Benzo(a)anthracene	1.1			0.820	3.6	0.0086	0.028	2.8	2.0
Benzo(a)pyrene	0.11			0.600	2.5	0.0086	0.027	1.8	1.5
Benzo(b)fluoranthene	1.1			0.750	1.7	0.012	0.036	1.7	1.6
Benzo(g,h,i)perylene	NE			0.430	1.3	0.0064	0.016	1.2	1.2
Benzo(k)fluoranthene	11			0.380	1.7	0.0082	0.028	1.4	1.1
bis(2-chloroisopropyl) ether	NE								
bis(2-ethylhexyl) phthalate	39								
Carbazole	NE								
Chrysene	110			0.690	3.1	0.0097	0.031	2.4	1.8
Dibenz(a,h)Anthracene	0.11			0.170	0.610	<0.0037	0.0073	0.54	0.460
Dibenzofuran	73								
Di-n-butyl phthalate	NE								
Fluoranthene	2,400			1.7	8.0	0.014	0.046	6.5	5.400
Fluorene	2,400			0.120	0.880	<0.0037	<0.0041	0.51	0.630
Hexachloroethane	1.8								
Indeno(1,2,3-c,d)Pyrene	1.1			0.370	1.3	0.006	0.016	1.1	1.0
Naphthalene	3.8			<0.039	0.980	<0.0037	<0.0041	0.2	0.550
Phenanthrene	NE			1.0	7.6	0.0041	0.018	4.8	4.7
Pyrene	1,800			1.1	6.0	0.012	0.045	5.2	4.8
PCBs									
PCB-1016	4.1	<0.028	<0.028						
PCB-1221	0.2	<0.028	<0.028						
PCB-1232	0.17	<0.028	<0.028						
PCB-1242	0.23	<0.028	<0.028						
PCB-1248	0.23	<0.028	<0.028						
PCB-1254	0.24	<0.028	<0.028						
PCB-1260	0.24	<0.028	<0.028						

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-102	USB-14	USB-14	USB-15	USB-15	USB-16	USB-16	USB-17
Depth (feet)		0-0.5	0-1	4-5	0-1	4-5	0-1	4-5	0-1
Sample Date		10/23/2013	09/13/2013						
SVOCs	(mg/kg)								
1-1-Biphenyl	NE								
2-Methylnaphthalene	240	0.400	<0.006	<0.006	<0.005	0.092	<0.005	<0.006	<0.005
Acenaphthene	3,600	0.400	<0.006	<0.006	<0.005	<0.005	<0.005	<0.006	<0.005
Acenaphthylene	NE	0.400	<0.006	<0.006	<0.005	<0.005	<0.005	<0.006	<0.005
Anthracene	18,000	0.400	<0.006	<0.006	<0.005	<0.005	<0.005	<0.006	<0.005
Benzo(a)anthracene	1.1	0.880	0.009	0.033	0.007	0.012	0.006	<0.006	0.005
Benzo(a)pyrene	0.11	0.640	0.008	0.037	0.006	0.013	0.005	<0.006	<0.005
Benzo(b)fluoranthene	1.1	0.800	0.018	0.083	0.015	0.03	0.011	<0.006	0.008
Benzo(g,h,i)perylene	NE	0.480	0.009	0.049	0.006	0.03	<0.005	<0.006	<0.005
Benzo(k)fluoranthene	11	0.440	0.008	0.028	0.007	0.007	<0.005	<0.006	<0.005
bis(2-chloroisopropyl) ether	NE								
bis(2-ethylhexyl) phthalate	39								
Carbazole	NE								
Chrysene	110	0.760	0.011	0.042	0.008	0.025	0.006	<0.006	0.005
Dibenz(a,h)Anthracene	0.11	0.400	<0.006	0.013	<0.005	0.005	<0.005	<0.006	<0.005
Dibenzofuran	73								
Di-n-butyl phthalate	NE								
Fluoranthene	2,400	1.9	0.024	0.044	0.015	0.018	0.012	<0.006	0.011
Fluorene	2,400	0.400	<0.006	<0.006	<0.005	<0.005	<0.005	<0.006	<0.005
Hexachloroethane	1.8								
Indeno(1,2,3-c,d)Pyrene	1.1	0.400	0.008	0.040	0.005	0.016	<0.005	<0.006	<0.005
Naphthalene	3.8	0.400	<0.006	<0.006	<0.005	0.059	<0.005	<0.006	<0.005
Phenanthrene	NE	0.960	0.015	0.020	0.007	0.051	0.007	<0.006	<0.005
Pyrene	1,800	1.4	0.021	0.039	0.015	0.023	0.012	<0.006	0.011
PCBs									
PCB-1016	4.1								
PCB-1221	0.2								
PCB-1232	0.17								
PCB-1242	0.23								
PCB-1248	0.23								
PCB-1254	0.24								
PCB-1260	0.24								

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	USB-17	USB-18	USB-18	USB-19	USB-19	USB-20	USB-20	USB-21
Depth (feet)		4-5	0-1	4-5	0-1	4-5	0-1	4-5	0-1
Sample Date		09/13/2013							
SVOCs	(mg/kg)								
1-1-Biphenyl	NE								
2-Methylnaphthalene	240	0.028	0.016	0.025	0.056	0.010	<0.005	0.010	0.024
Acenaphthene	3,600	0.015	<0.006	0.025	0.056	<0.006	<0.005	0.010	0.024
Acenaphthylene	NE	0.150	0.006	0.011	0.025	<0.006	<0.005	0.010	0.007
Anthracene	18,000	0.120	0.015	0.084	0.2	0.013	<0.005	0.026	0.083
Benzo(a)anthracene	1.1	0.420	0.070	0.260	0.600	0.049	0.007	0.100	0.260
Benzo(a)pyrene	0.11	0.410	0.070	0.260	0.640	0.065	0.007	0.010	0.250
Benzo(b)fluoranthene	1.1	0.660	0.140	0.390	1.100	0.120	0.012	0.020	0.390
Benzo(g,h,i)perylene	NE	0.190	0.058	0.120	0.240	0.075	0.005	0.038	0.100
Benzo(k)fluoranthene	11	0.210	0.043	0.120	0.370	0.040	<0.005	0.063	0.130
bis(2-chloroisopropyl) ether	NE								
bis(2-ethylhexyl) phthalate	39								
Carbazole	NE								
Chrysene	110	0.43	0.091	0.3	0.67	0.086	0.008	0.170	0.26
Dibenz(a,h)Anthracene	0.11	0.054	0.015	0.034	0.07	0.016	<0.005	0.012	0.032
Dibenzofuran	73								
Di-n-butyl phthalate	NE		0.15	0.61	1.30	0.11	0.013	0.270	0.60
Fluoranthene	2,400	0.98	<0.006	0.029	0.065	0.006	<0.005	0.011	0.024
Fluorene	2,400	0.18							
Hexachloroethane	1.8		0.051	0.11	0.21	0.055	<0.005	0.038	0.098
Indeno(1,2,3-c,d)Pyrene	1.1	0.18	0.016	0.032	0.17	0.01	<0.005	0.051	0.006
Naphthalene	3.8	0.03	0.012	0.036	0.12	0.012	<0.005	0.056	0.009
Phenanthrene	NE	0.55	0.072	0.45	0.97	0.054	<0.005	0.210	0.34
Pyrene	1,800	0.82	0.15	0.62	1.20	0.11	0.013	0.230	0.54
PCBs									
PCB-1016	4.1								
PCB-1221	0.2								
PCB-1232	0.17								
PCB-1242	0.23								
PCB-1248	0.23								
PCB-1254	0.24								
PCB-1260	0.24								

Table 3B
SVOC and PCB Soil Characterization Summary
Pre-2014 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	USB-21	USB-22	USB-22
Depth (feet)		4-5	0-1	4-5
Sample Date		09/13/2013		
SVOCs	(mg/kg)			
1-1-Biphenyl	NE			
2-Methylnaphthalene	240	<0.006	<0.005	<0.005
Acenaphthene	3,600	<0.006	<0.005	<0.005
Acenaphthylene	NE	<0.006	<0.005	<0.005
Anthracene	18,000	<0.006	<0.005	<0.005
Benzo(a)anthracene	1.1	0.010	<0.005	<0.005
Benzo(a)pyrene	0.11	0.010	<0.005	<0.005
Benzo(b)fluoranthene	1.1	0.012	<0.005	<0.005
Benzo(g,h,i)perylene	NE	0.006	<0.005	<0.005
Benzo(k)fluoranthene	11	0.080	<0.005	<0.005
bis(2-chloroisopropyl) ether	NE			
bis(2-ethylhexyl) phthalate	39			
Carbazole	NE			
Chrysene	110	0.01	<0.005	<0.005
Dibenz(a,h)Anthracene	0.11	<0.006	<0.005	<0.005
Dibenzofuran	73			
Di-n-butyl phthalate	NE	0.023	<0.005	<0.005
Fluoranthene	2,400	<0.006	<0.005	<0.005
Fluorene	2,400			
Hexachloroethane	1.8	<0.006	<0.005	<0.005
Indeno(1,2,3-c,d)Pyrene	1.1	<0.006	<0.005	<0.005
Naphthalene	3.8	<0.006	<0.005	<0.005
Phenanthrene	NE	0.017	<0.005	<0.005
Pyrene	1,800	0.022	<0.005	<0.005
PCBs				
PCB-1016	4.1			
PCB-1221	0.2			
PCB-1232	0.17			
PCB-1242	0.23			
PCB-1248	0.23			
PCB-1254	0.24			
PCB-1260	0.24			

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-1	GTA-SB-1	GTA-SB-2	GTA-SB-2	GTA-SB-3	GTA-SB-3	GTA-SB-4	GTA-SB-4
Depth (feet)		**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**
Sample Date		**11/17/2014**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000	7,600	8,800	5,600	7,800	12,000	7,200	11,000	13,000
Antimony	31	<2.3	<2.5	<1.9	3.3	<2.5	<2.4	3.5	<2.3
Arsenic	0.68	2.6	3.7	2.3	3.0	4.8	4.3	5.8	3.7
Barium	15,000	34	40	15	35	35	25	290	49
Beryllium	160	<2.3	<2.5	<1.9	<2.4	<2.5	<2.4	<2.4	<2.3
Cadmium	71	<2.3	<2.5	<1.9	<2.4	<2.5	<2.4	<2.4	<2.3
Calcium	NE	4,100	460	98	640	380	520	11,000	530
Chromium (Total)	NE	28	29	19	20	22	32	19	21
Cobalt	23	68	9.1	4.0	13	6.6	9.7	10	4.0
Copper	3,100	43	26	16	11	20	26	28	16
Iron	55,000	34,000	46,000	24,000	19,000	30,000	53,000	27,000	26,000
Lead	400	13	5.4	6.9	49	34	14	30	15
Magnesium	NE	350	430	170	580	1,000	290	1,000	810
Manganese	NE	49	66	61	49	97	180	92	48
Mercury	11	<0.092	<0.099	<0.077	<0.094	<0.098	<0.095	<0.094	<0.091
Nickel (soluable salts)	1,500	16	22	8.9	11	11	18	12	9.2
Potassium	NE	870	1,100	330	620	840	480	1,200	1,100
Selenium	390	<2.3	<2.5	<1.9	<2.4	<2.5	<2.4	<2.4	<2.3
Silver	390	<2.3	<2.5	<1.9	<2.4	<2.5	<2.4	<2.4	<2.3
Sodium	NE	270	71	140	270	140	70	600	310
Thallium	0.78	<1.8	<2.0	<1.5	<1.9	<2.0	<1.9	<1.9	<1.8
Vanadium	390	46	55	36	25	37	46	37	36
Zinc	23,000	19	32	31	50	110	330	27	19
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-5	GTA-SB-5	GTA-SB-6	GTA-SB-6	GTA-SB-7	GTA-SB-7	GTA-SB-8	GTA-SB-8
Depth (feet)		**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**
Sample Date		**11/17/2014**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000	9,400	19,000	6,200	13,000	6,500	10,000	20,000	6,400
Antimony	31	<2.3	<2.7	<2.3	<2.5	<2.3	<3.0	<2.1	<2.2
Arsenic	0.68	3.5	4.8	1.7	5.4	2.0	5.6	4.9	1.9
Barium	15,000	40	66	47	78	32	56	28	66
Beryllium	160	<2.3	<2.7	<2.3	<2.5	<2.3	<3.0	<2.1	<2.2
Cadmium	71	<2.3	<2.7	<2.3	<2.5	<2.3	<3.0	<2.1	<2.2
Calcium	NE	570	680	440	680	410	450	320	220
Chromium (Total)	NE	27	34	14	37	21	35	29	12
Cobalt	23	7.7	7.0	6.0	13	6.5	20	20	4.7
Copper	3,100	25	21	16	29	12	46	14	12
Iron	55,000	41,000	40,000	16,000	50,000	24,000	70,000	33,000	6,700
Lead	400	24	11	15	20	4.3	17	13	4.5
Magnesium	NE	320	910	180	290	290	400	480	200
Manganese	NE	76	60	36	120	22	140	190	30
Mercury	11	<0.091	<0.11	<0.092	<0.10	<0.093	<0.12	<0.085	<0.089
Nickel (soluable salts)	1,500	13	13	14	29	15	49	11	5.9
Potassium	NE	840	1,200	410	650	990	1,200	570	1,200
Selenium	390	<2.3	<2.7	<2.3	<2.5	<2.3	<3.0	<2.1	<2.2
Silver	390	<2.3	<2.7	<2.3	<2.5	<2.3	<3.0	<2.1	<2.2
Sodium	NE	320	390	140	290	<46	85	130	73
Thallium	0.78	<1.8	<2.1	<1.8	<2.0	<1.9	<2.4	<1.7	<1.8
Vanadium	390	53	58	22	57	54	60	36	15
Zinc	23,000	34	28	26	45	24	85	13	14
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-9	GTA-SB-9	GTA-SB-10	GTA-SB-10	GTA-SB-11	GTA-SB-11	GTA-SB-12	GTA-SB-12
Depth (feet)		**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**
Sample Date		**11/17/2014**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000	7,000	5,500	8,400	7,300	14,000	7,800	6,900	4,800
Antimony	31	24	14	<2.2	<2.4	330	22	<2.3	<2.9
Arsenic	0.68	3.2	5.8	12	1.9	13	3.2	3.7	2.8
Barium	15,000	64	72	140	32	790	110	39	28
Beryllium	160	<2.2	<2.1	<2.2	<2.4	<3.0	<2.3	<2.3	<2.9
Cadmium	71	19	19	<2.2	<2.4	65	4.6	<2.3	<2.9
Calcium	NE	6,000	5,200	24,000.00	440	6,000	680	270	65
Chromium (Total)	NE	80	81	24	22	90	20	31	29
Cobalt	23	44	40	43	6.7	190	23	7.8	<2.9
Copper	3,100	53	78	46	19	110	50	20	10
Iron	55,000	32,000	87,000	20,000	20,000	100,000	15,000	42,000	27,000
Lead	400	560	470	190	9.6	5,100	250	11	5.7
Magnesium	NE	470	440	3,500	910	810	380	380	460
Manganese	NE	160	410	110	54	340	42	48	26
Mercury	11	<0.089	<0.082	<0.088	<0.095	<0.12	<0.090	<0.094	<0.12
Nickel (soluable salts)	1,500	41	52	23	11	100	15	16	4.5
Potassium	NE	500	570	790	540	2,500.00	640	640	360
Selenium	390	<2.2	<2.1	<2.2	<2.4	6.9	<2.3	<2.3	<2.9
Silver	390	<2.2	<2.1	<2.2	<2.4	<3.0	<2.3	<2.3	<2.9
Sodium	NE	100	130	560	150	3,800	540	160	100
Thallium	0.78	<1.8	<1.6	<1.8	<1.9	<2.4	<1.8	<1.9	<2.3
Vanadium	390	19	21	38	37	24	27	55	52
Zinc	23,000	140	140	110	27	12,000	550	80	<12
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-13	GTA-SB-13	GTA-SB-14	GTA-SB-14	GTA-SB-15	GTA-SB-15	GTA-SB-16	GTA-SB-16
Depth (feet)		**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**
Sample Date		**11/17/2014**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000	8,500	7,300	10,000	6,100	3,900	6,600	9,600	6,600
Antimony	31	<2.9	<2.4	4.6	<2.4	<3.0	<2.2	<2.8	<2.4
Arsenic	0.68	4.6	2.4	4.7	2.9	3.0	1.9	6.0	0.61
Barium	15,000	59	44	75	32	50	41	34	40
Beryllium	160	<2.9	<2.4	<2.4	<2.4	<3.0	<2.2	3.9	<2.4
Cadmium	71	<2.9	<2.4	<2.4	<2.4	4.9	<2.2	<2.8	<2.4
Calcium	NE	390	<49	820	150	740	770	950	150
Chromium (Total)	NE	34	35	29	37	26	33	52	22
Cobalt	23	13	13	11	5.2	12	11	18	4.7
Copper	3,100	30	25	17	14	44	42	42	6.6
Iron	55,000	46,000	47,000	18,000	52,000	35,000	39,000	110,000	18,000
Lead	400	45	7.2	56	12	190	22	11	2.6
Magnesium	NE	330	260	1700	300	150	170	140	220
Manganese	NE	100	83	83	39	150	72	98	28
Mercury	11	<0.12	<0.097	<0.094	<0.095	<0.12	<0.087	<0.11	<0.097
Nickel (soluable salts)	1,500	22	28	19	7.6	17	21	47	9.0
Potassium	NE	1,300	1,000	1,100	360	560	900	880	1,200
Selenium	390	<2.9	<2.4	<2.4	<2.4	<3.0	<2.2	<2.8	<2.4
Silver	390	<2.9	<2.4	<2.4	<2.4	<3.0	<2.2	<2.8	<2.4
Sodium	NE	260	110	2,500	400	<60	45	<56	<49
Thallium	0.78	<2.4	<1.9	<1.9	<1.9	<2.4	<1.7	<2.2	<1.9
Vanadium	390	40	31	41	64	49	83	150	18
Zinc	23,000	59	51	73	16	77	31	65	16
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-17	GTA-SB-17	GTA-SB-18	GTA-SB-18	GTA-SB-19	GTA-SB-19	GTA-SB-20	GTA-SB-20
Depth (feet)		0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5
Sample Date		11/17/2014				11/19/2014			
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	7,800	11,000	14,000	5,800	5,200	7,300	9,100	10,000
Antimony	31	<3.0	<2.2	19	<2.1	<2.6	<2.5	<2.7	<2.4
Arsenic	0.68	1.1	4.9	10	2.3	0.84	<0.50	1.6	5.6
Barium	15,000	44	36	510	24	35	41	55	61
Beryllium	160	<3.0	2.4	<2.9	<2.1	<2.6	<2.5	<2.7	<2.4
Cadmium	71	<3.0	<2.2	3.8	<2.1	3.9	<2.5	<2.7	<2.4
Calcium	NE	4,400	55	4,900	110	9,100	280	250	100
Chromium (Total)	NE	25	39	40	43	17	20	25	40
Cobalt	23	6.4	14	38	6.1	11	3.4	4.1	7.1
Copper	3,100	14	23	57	15	15	7.5	30	28
Iron	55,000	24,000	85,000	39,000	66,000	25,000	12,000	40,000	60,000
Lead	400	4.9	10	810	4.7	22	8.0	11	6.0
Magnesium	NE	1,700	180	680	89	5,300	190	180	170
Manganese	NE	44	96	130	29	71	31	29	42
Mercury	11	<0.12	<0.090	<0.12	<0.086	<0.11	<0.10	<0.11	<0.098
Nickel (soluable salts)	1,500	12	32	41	15	9.0	5.3	9.9	17
Potassium	NE	1,200	880	1,200	480	550	880	1,200	1,100
Selenium	390	<3.0	<2.2	<2.9	<2.1	<2.6	<2.5	<2.7	<2.4
Silver	390	<3.0	<2.2	4.0	<2.1	<2.6	<2.5	<2.7	<2.4
Sodium	NE	79	68	2,500	83	<53	<50	<55	<49
Thallium	0.78	<2.4	<1.8	<2.3	<1.7	<2.1	<2.0	<2.2	<2.0
Vanadium	390	27	59	35	73	19	15	69	82
Zinc	23,000	18	50	3,900	22	64	<10	20	26
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-21	GTA-SB-21	GTA-SB-22	GTA-SB-22	GTA-SB-23	GTA-SB-23	GTA-SB-24	GTA-SB-24
Depth (feet)		0-2	4-5	0-2	4-5	0-2	4-5	0-2	4-5
Sample Date		11/19/2014				11/18/2014		11/17/2014	
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	8,900	7,500	9,100	4,900	5,800	7,800	7,800	8,600
Antimony	31	<2.7	<2.7	<2.1	<2.6	<2.7	<2.6	<2.2	<2.0
Arsenic	0.68	1.2	0.64	21	4.9	3.5	4.7	2.2	2.9
Barium	15,000	55	44	17	20	29	17	20	31
Beryllium	160	<2.7	<2.7	<2.1	<2.6	<2.7	<2.6	<2.2	<2.0
Cadmium	71	<2.7	<2.7	<2.1	<2.6	<2.7	<2.6	<2.2	<2.0
Calcium	NE	7,400	130	240	130	6,200	490	990	190
Chromium (Total)	NE	20	13	95	57	15	15	17	24
Cobalt	23	6.7	4.5	11	7.8	23	<2.6	3.7	4.5
Copper	3,100	15	12	24	17	32	12	14	19
Iron	55,000	17,000	6,800	90,000	49,000	33,000	12,000	14,000	27,000
Lead	400	14	3.2	8.6	12	27	5.2	110	15
Magnesium	NE	500	240	250	170	2,200	320	990	600
Manganese	NE	42	18	170	190	260	18	39	48
Mercury	11	<0.11	<0.11	<0.085	<0.10	<0.11	<0.11	<0.088	<0.079
Nickel (soluable salts)	1,500	14	6.8	24	18	22	4.2	7.6	9.8
Potassium	NE	1,300	1,500	270	250	520	480	520	570
Selenium	390	<2.7	<2.7	<2.1	<2.6	<2.7	<2.6	<2.2	<2.0
Silver	390	<2.7	<2.7	<2.1	<2.6	<2.7	<2.6	<2.2	<2.0
Sodium	NE	62	<54	<43	<51	<54	75	260	170
Thallium	0.78	<2.1	<2.2	<1.7	<2.0	<2.2	<2.1	<1.8	<1.6
Vanadium	390	26	15	73	62	22	26	25	40
Zinc	23,000	31	15	51	24	48	11	20	16
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-25	GTA-SB-25	GTA-SB-26	GTA-SB-26	GTA-SB-27	GTA-SB-27	GTA-SB-28	GTA-SB-28
Depth (feet)		**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**	**0-2**	**4-5**
Sample Date		**11/17/2014**		**11/18/2014**					
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000	7,200	6,000	22,000	18,000	12,000	5,400	6,300	8,100
Antimony	31	<2.1	<2.9	<2.9	22	<2.9	<2.4	<2.4	4.7
Arsenic	0.68	2.4	4.8	4.7	27	4.3	0.65	4.4	12
Barium	15,000	48	28	140	990	42	18	83	190
Beryllium	160	<2.1	<2.9	<2.9	<2.6	<2.9	<2.4	<2.4	<2.3
Cadmium	71	<2.1	<2.9	<2.9	150	<2.9	<2.4	6.7	19
Calcium	NE	35,000	360	1300	16,000	950	110	80,000	50,000
Chromium (Total)	NE	15	40	30	96	86	9.8	22	29
Cobalt	23	4.8	<2.9	11	86	15	18	13	34
Copper	3,100	29	24	19	120	34	7.7	22	42
Iron	55,000	13,000	34,000	26,000	19,000	78,000	7,900	18,000	18,000
Lead	400	33	10	63	22,000	17	5.1	850	1,400
Magnesium	NE	2,100	250	2,200	3500	270	99	3,300	5,000
Manganese	NE	150	31	780	210	32	27	92	1,900
Mercury	11	<0.084	<0.11	<0.12	0.33	<0.12	<0.095	0.31	0.23
Nickel (soluable salts)	1,500	8.1	5.9	18	160	31	20	15	32
Potassium	NE	420	520	1100	2,100	620	300	600	990
Selenium	390	<2.1	<2.9	<2.9	4.2	<2.9	<2.4	<2.4	<2.3
Silver	390	<2.1	<2.9	<2.9	<2.6	<2.9	<2.4	<2.4	16
Sodium	NE	87	170	<58	1,800	91	<47	390	260
Thallium	0.78	<1.7	<2.3	<2.3	<2.1	<2.3	<1.9	<1.9	<1.9
Vanadium	390	18	56	41	42	200	19	34	33
Zinc	23,000	57	13	62	1,400	67	37	75	220
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-29	GTA-SB-29	GTA-SB-30	GTA-SB-31	GTA-SB-32	GTA-SB-33	GTA-SB-34	GTA-SB-35
Depth (feet)		0-2	4-5	0-2	0-2	0-2	0-2	0-2	0-2
Sample Date		11/18/2014				11/17/2014		11/18/2014	
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	4,800	7,100	8,500	5,900	10,000	5,300	8,800	13,000
Antimony	31	<3.0	<3.0	<2.6	<2.0	<2.9	7.6	<2.5	<2.7
Arsenic	0.68	1.1	7.1	<0.53	2.0	5.5	5.5	3.3	3.4
Barium	15,000	46	24	29	33	200	220	62	58
Beryllium	160	<3.0	<3.0	<2.6	<2.0	<2.9	<2.8	<2.5	<2.7
Cadmium	71	<3.0	<3.0	<2.6	<2.0	<2.9	<2.8	<2.5	<2.7
Calcium	NE	490	350	310	280	2,800	9,100	1,700	1,100
Chromium (Total)	NE	39	92	14	22	27	21	15	16
Cobalt	23	<3.0	3.2	4.0	5.9	16	28	3.4	9.1
Copper	3,100	4.0	16	9.8	15	36	55	21	13
Iron	55,000	16,000	71,000	13,000	22,000	23,000	25,000	9,100	17,000
Lead	400	12	14	5.3	14	43	250	41	17
Magnesium	NE	220	150	130	150	610	2,000	610	730
Manganese	NE	12	84	31	40	95	150	84	62
Mercury	11	<0.12	<0.12	<0.11	<0.079	<0.12	0.12	<0.10	<0.11
Nickel (soluable salts)	1,500	<3.0	5.4	4.3	6.5	25	33	8.4	16
Potassium	NE	730	450	560	890	1,100	520	1,300	950
Selenium	390	<3.0	<3.0	<2.6	<2.0	<2.9	<2.8	<2.5	<2.7
Silver	390	<3.0	<3.0	<2.6	<2.0	<2.9	<2.8	<2.5	<2.7
Sodium	NE	<59	<60	86	260	220	140	<50	<53
Thallium	0.78	<2.4	<2.4	<2.1	<1.6	<2.3	<2.2	<2.0	<2.1
Vanadium	390	26	130	12	39	48	20	27	29
Zinc	23,000	<12	<12	12	23	96	350	39	56
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-36	GTA-SB-37	GTA-SB-38	GTA-SB-39	GTA-SB-40	GTA-SB-41	GTA-SB-42	GTA-SB-43
Depth (feet)		**0-2**	**0-2**	**0-2**	**0-2**	**0-2**	**0-2**	**0-2**	**0-2**
Sample Date		**11/18/2014**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000	3,300	3,800	3,400	25,000	5,300	5,200	5,900	6,900
Antimony	31	<2.3	<2.3	<2.3	12	<2.6	<1.9	<2.4	<2.3
Arsenic	0.68	1.6	2.4	1.2	12	2.4	1.8	2.2	2.7
Barium	15,000	14	27	16	250	35	25	38	39
Beryllium	160	<2.3	<2.3	<2.3	<2.7	<2.6	2.7	<2.4	<2.3
Cadmium	71	<2.3	<2.3	<2.3	12	<2.6	<1.9	<2.4	<2.3
Calcium	NE	230	1200	230	8,100	550	740	1,600	1,000
Chromium (Total)	NE	21	24	29	47	27	64	27	37
Cobalt	23	2.4	3.5	2.6	49	6.0	6.1	5.6	5.6
Copper	3,100	8.3	14	12	69	23	21	24	24
Iron	55,000	20,000	34,000	19,000	29,000	31,000	100,000	28,000	33,000
Lead	400	7.5	43	6.3	1,100	9.5	9.4	29	7.9
Magnesium	NE	100	200	120	6,100	250	180	290	420
Manganese	NE	35	45	43	850	50	56	100	63
Mercury	11	<0.093	<0.091	<0.093	<0.11	<0.10	<0.078	<0.097	<0.092
Nickel (soluable salts)	1,500	6.0	6.1	4.8	110	15	13	13	15
Potassium	NE	360	350	400	1,500	900	540	810	940
Selenium	390	<2.3	<2.3	<2.3	<2.7	<2.6	<1.9	<2.4	<2.3
Silver	390	<2.3	<2.3	<2.3	<2.7	<2.6	<1.9	<2.4	<2.3
Sodium	NE	<46	<46	<47	130	130	240	<49	<46
Thallium	0.78	<1.9	<1.8	<1.9	<2.2	<2.0	<1.6	<1.9	<1.8
Vanadium	390	38	42	39	48	43	65	39	55
Zinc	23,000	13	20	12	138	22	22	22	20
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-44	GTA-SB-45	GTA-SB-DUP 1	GTA-SB-DUP 2	GTA-SB-DUP 3	GTA-SB-DUP 4	GTA-SB-11C	GTA-SB-11C
Depth (feet)		0-2	0-2					0-2	4-5
Sample Date		11/18/2014						07/7/2017	
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	5,200	13,000	6,700	5,200	4,800	18,000		
Antimony	31	<2.4	<2.5	<2.1	<2.6	<2.1	270		
Arsenic	0.68	2.6	4.2	2.9	1.9	9.2	22		
Barium	15,000	34	74	20	27	13	1,900		
Beryllium	160	<2.4	<2.5	<2.1	<2.6	<2.1	<2.4		
Cadmium	71	<2.4	4.4	<2.1	<2.6	<2.1	2,300		
Calcium	NE	670	1,500	370	77	160	9,200		
Chromium (Total)	NE	20	26	11	32	29	380		
Cobalt	23	3.9	12	<2.1	12	4.7	6,200		
Copper	3,100	15	18	8.1	5.4	22	440		
Iron	55,000	23,000	27,000	14,000	23,000	58,000	33,000		
Lead	400	6.3	2,100	5.9	13	7.9	14,000	190	9.5
Magnesium	NE	240	1,100	270	180	110	1,300		
Manganese	NE	37	240	13	44	65	460		
Mercury	11	<0.095	<0.10	<0.086	<0.10	<0.083	<0.097		
Nickel (soluable salts)	1,500	9.6	14	3.1	13	5.5	490		
Potassium	NE	730	830	420	1300	310	2,300		
Selenium	390	<2.4	<2.5	<2.1	<2.6	<2.1	74		
Silver	390	<2.4	<2.5	<2.1	<2.6	<2.1	<2.4		
Sodium	NE	<47	64	93	<51	<41	4,600		
Thallium	0.78	<1.9	<2.0	<1.7	<2.1	<1.7	<1.9		
Vanadium	390	37	39	19	69	47	100		
Zinc	23,000	13	48	<8.6	27	20	16,000		
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-11C	GTA-SB-11N	GTA-SB-11N	GTA-SB-11N	GTA-SB-11E	GTA-SB-11E	GTA-SB-11E	GTA-SB-11S
Depth (feet)		**8-9**	**0-2**	**4-5**	**8-9**	**0-2**	**4-5**	**8-9**	**0-2**
Sample Date		**07/7/2017**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000								
Antimony	31								
Arsenic	0.68								
Barium	15,000								
Beryllium	160								
Cadmium	71								
Calcium	NE								
Chromium (Total)	NE								
Cobalt	23								
Copper	3,100								
Iron	55,000								
Lead	400	6.1	68	6.4	7.5	12	9.9	7.5	61
Magnesium	NE								
Manganese	NE								
Mercury	11								
Nickel (soluable salts)	1,500								
Potassium	NE								
Selenium	390								
Silver	390								
Sodium	NE								
Thallium	0.78								
Vanadium	390								
Zinc	23,000								
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-11S	GTA-SB-11S	GTA-SB-11W	GTA-SB-11W	GTA-SB-11W	GTA-SB-26C	GTA-SB-26C	GTA-SB-26C
Depth (feet)		**4-5**	**8-9**	**0-2**	**4-5**	**8-9**	**0-2**	**4-5**	**8-9**
Sample Date		**07/7/2017**					**07/10/2017**		
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000								
Antimony	31								
Arsenic	0.68								
Barium	15,000								
Beryllium	160								
Cadmium	71						<2.4	<2.5	<2.3
Calcium	NE								
Chromium (Total)	NE								
Cobalt	23								
Copper	3,100								
Iron	55,000								
Lead	400	11	6.9	14	9.6	8.3	11	7.4	7.0
Magnesium	NE								
Manganese	NE								
Mercury	11								
Nickel (soluable salts)	1,500								
Potassium	NE								
Selenium	390								
Silver	390								
Sodium	NE								
Thallium	0.78								
Vanadium	390								
Zinc	23,000								
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-26S	GTA-SB-26S	GTA-SB-26N	GTA-SB-26E	GTA-SB-26E	GTA-SB-26E	GTA-SB-26N	GTA-SB-26N
Depth (feet)		**0-2**	**4-5**	**8-9**	**0-2**	**4-5**	**8-9**	**0-2**	**4-5**
Sample Date		**07/10/2017**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000								
Antimony	31								
Arsenic	0.68								
Barium	15,000								
Beryllium	160								
Cadmium	71	<1.9	<2.1	<2.5	<2.6	<2.3	<2.3	<2.3	<2.3
Calcium	NE								
Chromium (Total)	NE								
Cobalt	23								
Copper	3,100								
Iron	55,000								
Lead	400	10	7.7	3.8	15	7.9	3.3	29	7.0
Magnesium	NE								
Manganese	NE								
Mercury	11								
Nickel (soluable salts)	1,500								
Potassium	NE								
Selenium	390								
Silver	390								
Sodium	NE								
Thallium	0.78								
Vanadium	390								
Zinc	23,000								
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-26N	GTA-SB-26W	GTA-SB-26W	GTA-SB-26W	GTA-SB-41C	GTA-SB-41C	GTA-SB-41C	GTA-SB-41N
Depth (feet)		**8-9**	**0-2**	**4-5**	**8-9**	**0-2**	**4-5**	**8-9**	**0-2**
Sample Date		**07/10/2017**				**07/7/2017**			
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000								
Antimony	31								
Arsenic	0.68								
Barium	15,000								
Beryllium	160								
Cadmium	71	<2.3	<2.5	<2.4	<2.4	<2.2	<2.3	<2.0	<2.3
Calcium	NE								
Chromium (Total)	NE								
Cobalt	23								
Copper	3,100								
Iron	55,000								
Lead	400	3.8	9.0	4.1	7.9	4.7	14	21	17
Magnesium	NE								
Manganese	NE								
Mercury	11								
Nickel (soluable salts)	1,500								
Potassium	NE								
Selenium	390								
Silver	390								
Sodium	NE								
Thallium	0.78								
Vanadium	390								
Zinc	23,000								
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-41N	GTA-SB-41N	GTA-SB-41E	GTA-SB-41E	GTA-SB-41E	GTA-SB-41S	GTA-SB-41S	GTA-SB-41S
Depth (feet)		**4-5**	**8-9**	**0-2**	**4-5**	**8-9**	**0-2**	**4-5**	**8-9**
Sample Date		**07/7/2017**							
Target Analyte List Metals	**(mg/kg)**								
Aluminum	77,000								
Antimony	31								
Arsenic	0.68								
Barium	15,000								
Beryllium	160								
Cadmium	71	<2.1	<2.2	<2.2	<2.1	<2.5	<2.1	<2.0	<2.3
Calcium	NE								
Chromium (Total)	NE								
Cobalt	23								
Copper	3,100								
Iron	55,000								
Lead	400	15	13	8.9	22	19	4.5	37	17
Magnesium	NE								
Manganese	NE								
Mercury	11								
Nickel (soluable salts)	1,500								
Potassium	NE								
Selenium	390								
Silver	390								
Sodium	NE								
Thallium	0.78								
Vanadium	390								
Zinc	23,000								
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	GTA-SB-41W	GTA-SB-41W	GTA-SB-41W	ESB-1	ESB-2	ESB-2	ESB-4	ESB-4
Depth (feet)		0-2	4-5	8-9	0-0.5	0-0.5	4-5	0-0.5	4-5
Sample Date		07/7/2017			12/11/2006	12/13/2006		12/12/2006	
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000				6,600 L	5,100	5,900 L	9,600 L	11,000 L
Antimony	31				<2.7>	<2.8 L	<2.3	<2.8 L	<2.8 L
Arsenic	0.68				6.3	0.65 B	5	5.9 J	4.7 J
Barium	15,000				64	29	37 B	41	41
Beryllium	160				<2.7	<2.8	<2.3	<2.8	<2.8
Cadmium	71	<2.3	<2.1	<2.3	<2.7	<2.8	<2.3	<2.8	<2.8
Calcium	NE				1,500	310 L	120 B	590 L	200 L
Chromium (Total)	NE				32	18 J	44	23 J	33 J
Cobalt	23				16	<2.8	7.7 B	4.8	<2.8
Copper	3,100				28	6.2 L	31	42 L	18 L
Iron	55,000				37,000	8,800	51,000	23,000	39,000
Lead	400	3.5	35	14	54	3.4 L	11	20 L	9.6 L
Magnesium	NE				460	160 L	210	840 L	340 L
Manganese	NE				110	15 K	150	44 K	29 K
Mercury	11				<0.11	<0.11	<0.092	<0.11	<0.11
Nickel (soluable salts)	1,500				15	3.6	15 B	9.4	5
Potassium	NE				670	780 K	310 B	940 K	750 K
Selenium	390				<2.7	<2.8	<2.3	<2.8	<2.8
Silver	390								
Sodium	NE				160 B	88 B	66 B	690 L	350 B
Thallium	0.78				<0.54		<0.46		
Vanadium	390				42	23 K	68	42 K	61 K
Zinc	23,000				95	<28	26	<28	<28
Other Metals									
Lithium	160					2.85	5.25	29	3.89
Strontium	47,000					46.7 K	62.4	20.5 K	40.2 K
Titanium	140,000					20 J	120	93 J	31 J
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-5	ESB-6	ESB-7	ESB-8	ESB-8 dup	ESB-10	ESB-13	ESB-16
Depth (feet)		0-0.5	4-5	4-5	5-6	5-6	4-5	4-5	3-4
Sample Date		12/15/2006		12/13/2006	12/7/2006		12/6/2006		12/13/2006
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	7,200 L	5,000	5,800 L	6,400	5,600	5,500	5,900	7,000 L
Antimony	31	<2.9	<2.8	<2.3 L	<2.9 L	<2.9 L	<3.1 L	<2.7 L	<2.9
Arsenic	0.68	5.5	0.73 B	2.9	4.6	3.2	1.6	2.9	4.8
Barium	15,000	39 B	25 B	23	46 K	45 K	44	45 K	35
Beryllium	160	<2.9	<2.8	<2.3	<2.9	5.3	<3.1	<2.7	<2.9
Cadmium	71	<2.9	<2.8	<2.3	56 K	3.1 K	<3.1	<2.7	<2.9
Calcium	NE	410 B	140 B	700 L	7,600	2,000	590	1,900	5,000 J
Chromium (Total)	NE	78	19	34 J	43	51	27	26	31 J
Cobalt	23	9.7 B	2.9 B	9.8	34	29	9.1	9.5	3
Copper	3,100	32	8.6	35 L	41	53	10	19	14 J
Iron	55,000	82,000	7,600	44,000	48,000	39,000	24,000	33,000	16,000
Lead	400	42	<2.8	5 L	190 J	42 J	5.3 J	37 J	21 J
Magnesium	NE	200	140	380 L	2,300 J	640 J	220 J	450 J	2,500 J
Manganese	NE	60	34	89 K	200 J	79 J	67 J	87 J	44
Mercury	11	<0.12	<0.11	<0.091	<0.12	<0.12	<0.12	<0.11	<0.12
Nickel (soluable salts)	1,500	23 B	4.4 B	25	75 K	50 K	17 K	21 K	6.4 J
Potassium	NE	410 B	740	790 K	1,300 J	990 J	1,200 J	1,200 J	780
Selenium	390	<2.9	<2.8	<2.3	<2.9	<2.9	<3.1	<2.7	<2.9
Silver	390								
Sodium	NE	<59	<56	51 B	81 B	<58	66 B	120 B	<58
Thallium	0.78	<0.59	<0.56		<0.59	<0.58	<0.62	<0.53	<0.58
Vanadium	390	190	17	96 K	65 J	60 J	22 J	32 J	28
Zinc	23,000	52	<28	41 J	82 K	110 K	<31	70 K	--
Other Metals									
Lithium	160	2.81	7.32	26.3	14.1	9.51	12.6	10.8	6.5 J
Strontium	47,000	24.4	38.5	38.9 K	83.8	101	81.6	66.8	20.3 J
Titanium	140,000	170	35	110 J	150	110	47	60	94
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-16 dup	ESB-17	ESB-19	ESB-21	ESB-21	ESB-22	ESB-22	ESB-23
Depth (feet)		3-4	0-0.5	0-0.5	0-0.5	4-5	0-0.5	4-5	0-0.5
Sample Date		12/13/2006	12/8/2006	12/13/2006	12/7/2006		12/12/2006		12/13/2006
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	7,200 L	6,600 L	1,000 K	5,100	6,900	7,300 L	6,900	9,000
Antimony	31	<2.7	<2.5	<2.9 L	<2.7	<2.7	<2.5 L	<2.9 L	<2.6 L
Arsenic	0.68	4	4.8	3.2 J	3	6.5	3.2 J	2.4 J	3.1 J
Barium	15,000	38	41	38	15	24	25	36	28
Beryllium	160	<2.7	<2.5	<2.9	<2.7	<2.7	<2.5	3	<2.6
Cadmium	71	<2.7	<2.5	<2.9	<2.7	<2.7	<2.5	<2.9	<2.6
Calcium	NE	18,000 J	560	920 L	850	1,600	590 L	<58 L	510 L
Chromium (Total)	NE	65 J	16	35 J	23	37	24 J	25 J	22 J
Cobalt	23	3.9	3.9	14	4	3.4	3	11	4
Copper	3,100	23 J	41	22 L	29	17	9.3 L	26 L	14 L
Iron	55,000	19,000	14,000	44,000 K	27,000	21,000	25,000	48,000	14,000
Lead	400	35 J	48	6 L	11	6.4	7.4 L	5.1 L	8.8 L
Magnesium	NE	7,700 J	590	280 L	530	1,100	230 L	160 L	940 L
Manganese	NE	48	62	100 K	45	47	19 K	72 K	57 K
Mercury	11	<0.11	<0.098	<0.11	<0.11	<0.11	<0.10	<0.12	<0.11
Nickel (soluable salts)	1,500	11 J	8.8	34	7	8	5.5	21	8.9
Potassium	NE	810	490	1,300 K	280	300	620 K	830 K	1,500 K
Selenium	390	<2.7	<2.5	<2.9	<2.7	<2.7	<2.5	<2.9	<2.6
Silver	390								
Sodium	NE	<54	<49	<57 L	<53	<53	180 B	270 B	600 L
Thallium	0.78	<0.54	<0.49		<0.53	<0.53			
Vanadium	390	30	26	58 K	38	36	39 K	34 K	36 K
Zinc	23,000	35	41	58 J	<26	<30	26 K	62 J	<26
Other Metals									
Lithium	160	15.7 J	6.9				7.55	2.99	8.95
Strontium	47,000	46.7 J	243				23.3 K	36.5 K	20.8 K
Titanium	140,000	82	90				41 J	88 J	190 J
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-24	ESB-25	ESB-26	ESB-26	ESB-27	ESB-28	ESB-29	ESB-30
Depth (feet)		4-5	4-5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5	0-0.5
Sample Date		12/13/2006		12/12/2006		12/14/2006	12/11/2006		12/14/2006
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	3,400	7,700 L	8,100	8,100	18,000 L	3,800	6,400	16,000 L
Antimony	31	<3.0 L	<2.4 L	<2.7	<2.7	3.6 B	<2.9	<3.1	2.8 B
Arsenic	0.68	5.5 J	4.5 J	3.7	3.7	74	4.4	12	46
Barium	15,000	21	38	41	41	54 B	40	56	27 B
Beryllium	160	<3.0	<2.4	<2.7	<2.7	<2.5	<2.9	<3.1	<2.7
Cadmium	71	<3.0	<2.4	<2.7	<2.7	<2.5	<2.9	3.7	<2.7
Calcium	NE	190 L	380 L	4,600	4,600	1,700	1,700	4,900	1,500
Chromium (Total)	NE	8.4	32 J	35	35	35	22	67	26
Cobalt	23	<3.0	7.7	17	17	78	8.6	18	35
Copper	3,100	74 L	31 L	79	79	15	20	67	13
Iron	55,000	8,400	38,000	37,000	37,000	31,000	11,000	71,000	24,000
Lead	400	63 L	7.6 L	10	10	11	16	45	7.8
Magnesium	NE	180 L	300 L	360	360	730	280	430	600
Manganese	NE	40 K	47 K	130	130	850	50	93	240
Mercury	11	<0.12	<0.095	<0.11	<0.11	<0.10	<0.12	<0.12	<0.11
Nickel (soluable salts)	1,500	<3.0	18	31	31	14 B	11	83	11 B
Potassium	NE	330 K	920 K	670	670	1,100	1,100	920	940
Selenium	390	<3.0	<2.4	<2.7	<2.7	<2.5	<2.9	<3.1	<2.7
Silver	390								
Sodium	NE	86 B	180 B	83 B	83 B	160 B	190 B	190 B	140 B
Thallium	0.78			<0.54	<0.54	<0.5	<0.58	<0.62	<0.54
Vanadium	390	14 K	61 K	61	61	140	41	110	79
Zinc	23,000	<30	31 J	120	120	<25	<29	66	<27
Other Metals									
Lithium	160	4.33	5.4			98	6.28	7.4	41.9
Strontium	47,000	11.4 K	34.1 K			132	63.9	64.9	99.9
Titanium	140,000	41 J	44 J			140	11	240	140
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-31	ESB-32	ESB-32	ESB-33	ESB-33	ESB-34	ESB-34	ESB-44
Depth (feet)		0-0.5	0-0.5	4-5	0-0.5	4-5	0-0.5	4-5	0-0.5
Sample Date		12/11/2006	12/13/2006		12/6/2006		12/13/2006		12/26/2006
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	4,900	7,800 L	6,600 L	8,000	6,100	6,300	1,900	5,200
Antimony	31	8.3	<2.6 L	<2.5 L	<2.9	<2.9	<2.7 L	<2.6 L	<2.8 L
Arsenic	0.68	8.4	5.8 J	2.6 J	4.4	2.1	4.1 J	3.4 J	4.1 J
Barium	15,000	130	25	29	130	37	17	7.5	26 K
Beryllium	160	<2.7	<2.6	<2.5	<2.9	<2.9	<2.7	<2.6	<2.8
Cadmium	71	<2.7	<2.6	<2.5	8.2	<2.9	<2.7	<2.6	<2.8
Calcium	NE	2,000	640 L	<50	9,200	2,700	400 L	170	1,500 J
Chromium (Total)	NE	67	48 J	33 J	33	30	23 J	20 J	23
Cobalt	23	40	6	5.4	22	8.5	6.6	7.6	3.8
Copper	3,100	100	30 L	11 L	27	18	27 L	17 L	27
Iron	55,000	100,000	49,000	29,000	49,000	37,000	32,000	44,000	28,000
Lead	400	380	11 L	6.4 L	320	16	6.1 L	4.6 L	7.1 J
Magnesium	NE	390	220 L	150 L	2,300	610	250 L	170 L	950 K
Manganese	NE	410	82 K	19 K	210	52	150 K	310 K	41
Mercury	11	<0.11	<0.10	<0.10	0.39	<0.12	<0.11	<0.10	<0.11
Nickel (soluable salts)	1,500	56	12	8.3	37	18	14	12	8.4
Potassium	NE	510	390 K	540 K	1,500	1,400	400 K	130 K	650 K
Selenium	390	<2.7	<2.6	<2.5	<2.9	<2.9	<2.7	<2.6	<2.8
Silver	390								
Sodium	NE	150 B	79 B	54 B	320 B	110 B	<55 L	<51 L	190 B
Thallium	0.78	<0.55			<0.58	<0.58			<0.56
Vanadium	390	50	65 K	74 K	44	36	54 K	39 K	44
Zinc	23,000	820	<26	<25	150	40	<27	<26	<28
Other Metals									
Lithium	160	11.9	3.48	1.6			2.15	0.83	6.25
Strontium	47,000	62.9	26.6 K	27.3 K			15.4 K	9.76 K	34.4
Titanium	140,000	74	110 J	23 J			96 J	170 J	66 K
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-44	ESB-44 Dup	ESB-45	ESB-46	ESB-49	ESB-49	ESB-50	ESB-51
Depth (feet)		4-5	4-5	0-0.5	0-0.5	0-0.5	4-5	0-0.5	0-0.5
Sample Date		12/26/2006	12/11/2006	12/7/2006				12/8/2006	
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	5,400	5,000	14,000 L	16,000 L	10,000	6,700	5,300	2,900
Antimony	31	<2.7 L	<2.6 L	62	12	<3.2	<2.5	<3	<2.7
Arsenic	0.68	3.9 J	3.8 J	9.2	2.1	7.1	6.2	4.3	2.3
Barium	15,000	22 K	29 K	570	150	51	110	27	26
Beryllium	160	<2.7	<2.6	<2.6	<2.8	<3.2	<2.5	<3	<2.7
Cadmium	71	<2.7	<2.6	18	<2.8	<3.2	2.6	<3	<2.7
Calcium	NE	6,900 J	1,200 J	5,800	4,800	1,100	820	350	250
Chromium (Total)	NE	25	22	58	24	32	22	33	15
Cobalt	23	3.8	4.6	95	12	18	9.5	9.8	4.1
Copper	3,100	22	24	100	14	44	71	33	13
Iron	55,000	27,000	25,000	45,000	11,000	31,000	20,000	52,000	12,000
Lead	400	14 J	7.2 J	1,300	94	60	99	31	260
Magnesium	NE	3,300 K	880 K	1,200	10,000	990	650	200	120
Manganese	NE	46	44	200	250	150	87	110	26
Mercury	11	<0.11	<0.11	<0.10	<0.11	<0.13	<0.10	<0.12	<0.11
Nickel (soluable salts)	1,500	7.2	12	94	17	26	19	19	8.6
Potassium	NE	430 K	680 K	1,400	1,100	690	530	600	300
Selenium	390	<2.7	<2.6	<2.6	<2.8	<3.2	<2.5	<3	<2.7
Silver	390								
Sodium	NE	170 B	190 B	860	1,900	95 B	56 B	<60	<54
Thallium	0.78	<0.53	<0.53	<0.51	<0.55	<0.63	<0.5	<0.6	<0.54
Vanadium	390	49	41	59	34	49	30	76	22
Zinc	23,000	28	27	1,700	210	76	70	44	28
Other Metals									
Lithium	160	4.16	5.85	18.2	60.5	14.2	11.7	6.3	3.48
Strontium	47,000	29.9	34.6	117	38.6	30.3	19.4	36.8	11
Titanium	140,000	71 K	61 K	150	540	110	88	98	48
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-54	ESB-54	ESB-54 Dup	ESB-56	ESB-56	ESB-67	ESB-68	ESB-69
Depth (feet)		0-0.5	3-3.5	3-3.5	0-0.5	2-3	0-0.5	0-0.5	0-0.5
Sample Date		1/18/2007					8/15/2007		
Target Analyte List Metals	(mg/kg)								
Aluminum	77,000	5,700 K	8,100 K	6,200 K	19,000 K	4,300 K			
Antimony	31	<2.5 L	<2.4 L	<3	<2.5 L	<2.2 L	26.6 L	7.89 L	387 L
Arsenic	0.68	3.2 L	7.5 L	1.7 L	7.1 L	3.3 L	4.87 J	4.68 J	13.6 J
Barium	15,000	34 J	130 J	48 J	220 J	66 J			
Beryllium	160	<2.5	<2.4	<3	<2.5	<2.2	<2.35	<2.87	<2.80
Cadmium	71	<2.5	11 J	<3	4.7 J	<2.2	4.09 J	<2.87	50 J
Calcium	NE	810J	2,300 J	1,200 J	4,600 J	750 J			
Chromium (Total)	NE	21 J	34 J	34 J	29 J	12 J	34.2 L	47.7 L	1,640 L
Cobalt	23	4.1 K	12 K	5.3 K	13 K	26 K			
Copper	3,100	17 J	92 J	19 J	38 J	31 J	43.3 J	37.1 J	129 J
Iron	55,000	24,000	30,000	43,000	29,000	14,000			
Lead	400	33 J	210 J	10 J	350 J	62 K	481	137	811
Magnesium	NE	420 J	790 J	290 J	3,000 J	<450			
Manganese	NE	59 J	170 J	26 J	520 J	42			
Mercury	11	<0.099	0.18	<0.12	<0.10	<0.09	<0.094	<0.115	<0.112
Nickel (soluable salts)	1,500	9.4 K	24 K	12 K	22 K	9.9 K	31.9 B	11.6 B	92.5 L
Potassium	NE	390 J	570 J	880 J	1,000 J	310 J			
Selenium	390	<2.5	<2.4	<3	<2.5	<2.2	<2.35	<2.87	5.81
Silver	390								
Sodium	NE	89 L	110 L	<60 L	180 L	56 L			
Thallium	0.78	<0.49	<0.48	<0.6	<0.5	<0.45	<1.88	<2.30	<2.23
Vanadium	390	33	51	42	31	22			
Zinc	23,000	<250	<240	34	320	280	865 J	91.9 J	6,360 J
Other Metals									
Lithium	160								
Strontium	47,000								
Titanium	140,000								
Cyanide (Total)	NE								
TCLP lead	NE								

Table 4
Metals Soil Characterization Summary
2014-2017 Sampling

Sample Identification	USEPA Region 3 Residential RSLs	ESB-69 Dup	ESB-70	ESB-71	USB-23
Depth (feet)		0-0.5	0-0.5	0-0.5	Unknown
Sample Date		8/15/2007	8/15/2007	8/15/2007	
Target Analyte List Metals	(mg/kg)				
Aluminum	77,000				
Antimony	31	105 L	2.35 B	<2.38	
Arsenic	0.68	27.8 J	2.8 J	3.13 J	
Barium	15,000				
Beryllium	160	<2.79	<2.79	<2.38	
Cadmium	71	20.8 J	<2.79	<2.38	
Calcium	NE				
Chromium (Total)	NE	688 L	28.5 L	20.9	
Cobalt	23				
Copper	3,100	157 J	14.6 J	20.6	
Iron	55,000				
Lead	400	602	39.3	15.6	2,900
Magnesium	NE				
Manganese	NE				
Mercury	11	<0.112	<0.112	<0.095	
Nickel (soluable salts)	1,500	84.1 L	7.58 B	8.75 B	
Potassium	NE				
Selenium	390	2.37 J	<2.79	<2.38	
Silver	390				
Sodium	NE				
Thallium	0.78	<2.23	<2.23	<1.9	
Vanadium	390				
Zinc	23,000	15,300 J	65.5 J	83.2 J	
Other Metals					
Lithium	160				
Strontium	47,000				
Titanium	140,000				
Cyanide (Total)	NE				
TCLP lead	NE				

Table 5
SVOC Groundwater Characterization Summary

Sample Identification	Comparison Value	GTA-MW-1		GTA-MW-2		GTA-MW-3		GTA-MW-4		GTA-MW-5		EGW-9D	EGW-10		EGW-12	
Sample Date	MCL (RSL as noted)	1/14/2015	3/15/2018	1/14/2015	3/14/2018	1/14/2015	3/15/2018	1/14/2015	3/15/2018	1/13/2015	3/14/2018	1/14/2015	1/13/2015	3/14/2018	1/13/2015	3/15/2018
SVOCs	(ug/L)															
2,4,5-Trichlorophenol	1,200*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2,4,6-Trichlorophenol	4.1*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2,4-Dichlorophenol	46*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2,4-Dimethylphenol	360*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2,4-Dinitrophenol	39*	<10	<5.0**	<12	<5.0**	<10	<5.0**	<10	<5.0**	<11	<5.6**	<10	<10	<5.6**	<11	<5.0**
2,4-Dinitrotoluene	0.24*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2,6-Dinitrotoluene	0.049*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2-Chloronaphthalene	750*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2-Chlorophenol	91*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2-Methyl phenol	930*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	8.3	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2-Methylnaphthalene	36*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
2-Nitroaniline	190*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
2-Nitrophenol	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
3&4-Methylphenol	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
3,3-Dichlorobenzidine	0.13*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
3-Nitroaniline	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
4,6-Dinitro-2-methyl phenol	1.5*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
4-Bromophenylphenyl ether	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
4-Chloro-3-methyl phenol	1,400*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
4-Chloroaniline	0.37*	<5.0	<5.0**	<5.9	<5.0**	<5.0	<5.0**	<5.0	<5.0**	<5.6	<5.6**	<5.0	<5.0	<5.6**	<5.6	<5.0**
4-Chlorophenyl Phenyl ether	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
4-Nitroaniline	3.8*	<5.0	<5.0**	<5.9	<5.0**	<5.0	<5.0**	<5.0	<5.0**	<5.6	<5.6**	<5.0	<5.0	<5.6**	<5.6	<5.0**
4-Nitrophenol	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Acenaphthene	530*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Acenaphthylene	NE	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Acetophenone	1,900*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Anthracene	1,800*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Atrazine	3.0	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Benzo(a)anthracene	0.003*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Benzo(a)pyrene	0.2*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Benzo(b)fluoranthene	0.25*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Benzo(g,h,i)perylene	NE	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Benzo(k)fluoranthene	2.5*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Biphenyl (Diphenyl)	0.83*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Butyl benzyl phthalate	16*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Caprolactam	9,900*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Carbazole	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Chrysene	25*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Di-n-butyl phthalate	90*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Di-n-octyl phthalate	NE	<5.0	<5.0**	<5.9	<5.0**	<5.0	<5.0**	<5.0	<5.0**	<5.6	<5.6**	<5.0	<5.0	<5.6**	<5.6	<5.0**
Dibenz(a,h)Anthracene	0.025*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56	<5.0	<5.0	<0.56	<5.6	<0.50**
Dibenzofuran	7.9*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Diethyl phthalate	15,000*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Dimethyl phthalate	NE	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Fluoranthene	800*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Fluorene	290*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Hexachlorobenzene	1	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Hexachlorobutadiene	0.14*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Hexachlorocyclopentadiene	50	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Hexachloroethane	0.33*	<5.0	<2.5**	<5.9	<2.5**	11	<2.5**	<5.0	<2.5**	670	<2.8**	<5.0	28	<2.8**	<5.6	<2.5**
Indeno(1,2,3-c,d)Pyrene	0.25*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Isophorone	78*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
N-Nitrosodi-n-propyl amine	0.011*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
N-Nitrosodiphenylamine	12*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Naphthalene	0.17*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	13	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Nitrobenzene	0.14*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Pentachlorophenol	1	<5.0	<5.0**	<5.9	<5.0**	<5.0	<5.0**	<5.0	<5.0**	<5.6	<5.6**	<5.0	<5.0	<5.6**	<5.6	<5.0**
Phenanthrene	NE	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Phenol	5,800*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
Pyrene	120*	<5.0	<0.50**	<5.9	<0.50**	<5.0	<0.50**	<5.0	<0.50**	<5.6	<0.56**	<5.0	<5.0	<0.56**	<5.6	<0.50**
Pyridine	20	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
bis(2-chloroethoxy) methane	59*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
bis(2-chloroethyl) ether	0.014*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
bis(2-chloroisopropyl) ether	0.014*	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	<5.0	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**
bis(2-ethylhexyl) phthalate	6	<5.0	<2.5**	<5.9	<2.5**	<5.0	<2.5**	9.5	<2.5**	<5.6	<2.8**	<5.0	<5.0	<2.8**	<5.6	<2.5**

Table 6
VOC Groundwater Characterization Summary

Sample Identification	Comparison Values	GTA-MW-1		GTA-MW-2		GTA-MW-3		GTA-MW-4		GTA-MW-5 (EGW-10D)		
Sample Date	**MCL (RSL as noted)**	**1/14/2015**	**3/15/2018**	**1/14/2015**	**3/14/2018**	**1/14/2015**	**3/15/2018**	**1/14/2015**	**3/15/2018**	**12/2009**	**1/15/2015**	**3/14/2018**
VOCs	**(ug/L)**											
1,1,1-Trichloroethane	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,1,2,2-Tetrachloroethane	0.076*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		1.5	<1.0
1,1,2-Trichloroethane	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	1.3
1,1,2-Trichlorotrifluoroethane	10,000*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		2.9	<1.0
1,1-Dichloroethane	2.8*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,1-Dichloroethene	7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	14	10
1,2,3-Trichlorobenzene	7*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,2,4-Trichlorobenzene	70	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,2-Dibromo-3-chloropropane	0.2	<10	<5.0	<10	<5.0	<10	<5.0	<10	<5.0		<10	<5.0
1,2-Dibromoethane	0.05	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,2-Dichlorobenzene	600	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,2-Dichloroethane	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		2.8	1.1
1,2-Dichloropropane	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,3-Dichlorobenzene	NE	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
1,4-Dichlorobenzene	75	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
2-Butanone (MEK)	5,600*	<10	<10	<10	<10	<10	<10	<10	<10	< 10	<10	<10
2-Hexanone (MBK)	38	<10	<5.0	<10	<5.0	<10	<5.0	<10	<5.0		<10	<5.0
4-Methyl-2-Pentanone (MIBK)	6,300*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0
Acetone	14,000*	<10	<10	<10	<10	<10	<10	<10	<10	23 L	<10	<10
Benzene	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		4.0	2.1
Bromochloromethane	83*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Bromodichloromethane	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3	<1.0	<1.0
Bromoform	80	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0
Bromomethane	7.5*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Carbon Disulfide	810*	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10
Carbon tetrachloride	5	<1.0	<1.0	290	410	79	110	11	5.4	<1.0	29	26
Chlorobenzene	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Chloroethane	21,000*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Chloroform	80	1.3	<1.0	190	380	9.4	6.3	2.0	1.0	22	15	8.4
Chloromethane	192*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Cyclohexane	13,000*	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10
Dibromochloromethane	80	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Dichlorodifluoromethane	200*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Ethylbenzene	700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Isopropylbenzene	450*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Methyl Acetate	20,000*	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10
Methyl-t-Butyl Ether	14*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Methylcyclohexane	NE	<10	<10	<10	<10	<10	<10	<10	<10		<10	<10
Methylene chloride	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		4.2	0.58 J
Naphthalene	0.17*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		29	<1.0
Styrene	100	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Tetrachloroethene	5	24	<1.0	360	720	120	12	32	<1.0	4	28,000	2,800
Toluene	1,000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		1.4	<1.0
Trichloroethene	5	1.3	<1.0	89	170	5.7	<1.0	2.0	<1.0	<1.0	3,400	1,500
Trichlorofluoromethane	5,200*	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		<5.0	<5.0
Vinyl Chloride	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	38	0.67J
cis-1,2-Dichloroethene	70	1.6	<1.0	18	35	9.4	<1.0	2.3	<1.0		12,000	4,700
cis-1,3-Dichloropropene	0.47*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
m&p-Xylene	190*	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0		2.5	<2.0
o-Xylene	190*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		1.9	<1.0
trans-1,2-Dichloroethene	100	<1.0	<1.0	5.0	9.7	<1.0	<1.0	<1.0	<1.0	<1.0	310	180
trans-1,3-Dichloropropene	0.47*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0

Table 6
VOC Groundwater Characterization Summary

Sample Identification	Comparison Values	EGW-9D		EGW-10				EGW-11	EGW-12		
Sample Date	MCL (RSL as noted)	01/2009	1/14/2015	09/2009	10/2009	1/13/2015	3/14/2018	01/2010	02/21/2013	1/13/2015	3/15/2018
VOCs	(ug/L)										
1,1,1-Trichloroethane	200		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	0.076*		<1.0			1.4	<10		<1.0	<1.0	<1.0
1,1,2-Trichloroethane	5		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,1,2-Trichlorotrifluoroethane	10,000*		<1.0			4.2	<10		<1.0	<1.0	<1.0
1,1-Dichloroethane	2.8*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,1-Dichloroethene	7	<1.0	<1.0	2	3	12	13	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	7*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	70		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane	0.2		<10			<10	<50		<10	<10	<5.0
1,2-Dibromoethane	0.05		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,2-Dichlorobenzene	600		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,2-Dichloroethane	5		<1.0			2.6	<10		<1.0	<1.0	<1.0
1,2-Dichloropropane	5		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,3-Dichlorobenzene	NE		<1.0			<1.0	<10		<1.0	<1.0	<1.0
1,4-Dichlorobenzene	75		<1.0			<1.0	<10		<1.0	<1.0	<1.0
2-Butanone (MEK)	5,600*	< 10 UL	<10	< 10 UL	< 10 UL	<10	<100	< 10	<10	<10	<10
2-Hexanone (MBK)	38		<10			<10	<50		<10	<10	<5.0
4-Methyl-2-Pentanone (MIBK)	6,300*		<5.0			<5.0	<50		<5.0	<5.0	<5.0
Acetone	14,000*	< 10 UL	<10	< 10 UL	< 10 UL	<10	<100	< 10	<10	<10	<10
Benzene	5		<1.0			3.7	<10		<1.0	<1.0	<1.0
Bromochloromethane	83*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Bromodichloromethane	80	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0
Bromoform	80		<5.0			<5.0	<50		<5.0	<5.0	<5.0
Bromomethane	7.5*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Carbon Disulfide	810*		<10			<10	<100		<10	<10	<10
Carbon tetrachloride	5	<1.0	<1.0	21	26	41	33	<1.0	7.7	10	6.8
Chlorobenzene	100		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Chloroethane	21,000*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Chloroform	80	<1.0	<1.0	9	8	10	11	<1.0	<1.0	3.5	2.1
Chloromethane	192*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Cyclohexane	13,000*		<10			<10	<100		<10	<10	<10
Dibromochloromethane	80		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Dichlorodifluoromethane	200*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Ethylbenzene	700		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Isopropylbenzene	450*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Methyl Acetate	20,000*		<10			<10	<100		<10	<10	<10
Methyl-t-Butyl Ether	14*		<1.0			<1.0	<10		<10	<1.0	<1.0
Methylcyclohexane	NE		<10			<10	<100		<1.0	<10	<10
Methylene chloride	5		<1.0			1.6	<10		<1.0	<1.0	<1.0
Naphthalene	0.17*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Styrene	100		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Tetrachloroethene	5	1	1.1	970	970	5,400	5,100	<1.0	12	14	7.8
Toluene	1,000		<1.0			<1.0	<10		<1.0	<1.0	<1.0
Trichloroethene	5	<1.0	<1.0	270	360	2,800	3,200	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	5,200*		<5.0			<5.0	<50		<5.0	<5.0	<5.0
Vinyl Chloride	2	<1.0	<1.0	0.6 J	<1.0	4.7	<10	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	70	< 10	<1.0	570	660	11,000	13,000	< 10	<1.0	<1.0	<1.0
cis-1,3-Dichloropropene	0.47*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
m&p-Xylene	190*		<2.0			<2.0	<20		<2.0	<2.0	<2.0
o-Xylene	190*		<1.0			<1.0	<10		<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	100	<1.0	<1.0	40	45	290	310	<1.0	<1.0	<1.0	<1.0
trans-1,3-Dichloropropene	0.47*		<1.0			<1.0	<10		<1.0	<1.0	<1.0

Table 7
Metals Groundwater Characterization Summary

Sample Identification	Comparison Value	GTA-MW-1				GTA-MW-2				GTA-MW-3	
		Total	Dissolved	Total	Disolved	Total	Dissolved	Total	Disolved	Total	Dissolved
Sample Date	MCL (RSL as noted)	1/14/2015	1/29/2015	3/15/2018		1/14/2015	1/29/2015	3/14/2018		1/14/2015	1/29/2015
Target Analyte List Metals	ug/L										
Aluminum	20,000*	180	<100	530	<50**	210	<100	370	<1,000**	1,100	140
Antimony	6	<5.0	<5.0	<2.5**	<2.5**	<5.0	<5.0	<2.5**	<50**	<5.0	<5.0
Arsenic	10	<1.0	<1.0	3.3	<0.5**	<1.0	<1.0	1.0	<10**	<1.0	<1.0
Barium	2,000	69	67	38	30	84	73	69	65	96	100
Beryllium	4	<1.0	<1.0	<0.5**	<0.5**	<1.0	<1.0	0.90 J	<10**	2.1	2.3
Cadmium	5	<1.0	<1.0	<0.5**	<0.5**	<1.0	<1.0	<0.5**	<10**	<1.0	<1.0
Calcium	NE	48,000	63,000	67,000	59,000	33,000	19,000	14,000	13,000	11,000	9,500
Total Chromium	100	78	1.1	5.8	<0.5	76	2.1	7.0	<20**	340	5.0
Cobalt	6*	73	65	43	39	20	20	12	12 J	43	42
Copper	1,300	7.7	<1.0	7.8	1.5	6.4	<1.0	4.5	<10**	19	3.5
Iron	14,000*	1,400	250	4,300	110	1,100	430	1,600	<1,000**	8,300	300
Lead	15	<1.0	<1.0	4.2	<0.5**	1.1	<1.0	2.1	<10**	4.7	<1.0
Magnesium	NE	27,000	30,000	23,000	29,000	16,000	9,500	6,800	8,000	4,800	5,000
Manganese	430*	1,300	1,400	630	600	410	540	220	220	480	380
Mercury	2	<0.20	<0.20	0.44	<0.20**	<0.20	<0.20	<0.10**	<4**	<0.20	<0.20
Nickel (soluble salts)	390	82	49	12	9.3	73	73	28	12 J	240	82
Potassium	NE	6,700	7,500	5100	6,300	4,500	2,000	960	<1,000**	2,800	2,100 E
Selenium	50	<1.0	<1.0	0.59 J	<0.5**	7.5	3.5	4.3	<10**	<1.0	<1.0
Silver	94	<1.0	<1.0	<0.5**	<0.5**	<1.0	<1.0	<0.5**	<10**	<1.0	<1.0
Sodium	1,000	98,000	110,000	92,000	110,000	110,000	100,000	130,000	150,000	35,000	34,000
Thallium	2	<1.0	<1.0	<0.5**	<0.5**	<1.0	<1.0	<0.5**	<10**	<1.0	<1.0
Vanadium	86*	<5.0	<5.0	12	<0.5**	<5.0	<5.0	3.6	<10**	18	<5.0
Zinc	6,000*	59	47	41	25	40	47	53	<200**	150	150

Table 7
Metals Groundwater Characterization Summary

Sample Identification	Comparison Value	GTA-MW-3		GTA-MW-4				GTA-MW-5			
		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Date	MCL (RSL as noted)	3/15/2018		1/14/2015	1/29/2015	3/15/2018		1/13/2015	1/29/2015	3/14/2018	
Target Analyte List Metals	ug/L										
Aluminum	20,000*	170	85 J	280	2,600	800	<50**	<100	8,700	18,000	<1,000**
Antimony	6	<2.5**	<2.5**	<5.0	<5.0	<2.5**	<2.5**	<5.0	17	19	<50**
Arsenic	10	<0.5**	<0.5**	<1.0	1.3	0.74 J	<0.5**	1.7	3.3	4.4	<10**
Barium	2,000	53	54	150	69	35	24	750	710	230	96
Beryllium	4	1.9	1.8	3.2	1.1	0.70 J	0.55 J	<1.0	<20	1.0	<10**
Cadmium	5	<0.5**	<0.5**	<1.0	<1.0	<0.5**	<0.5**	1.3	2.4	2.5	<10**
Calcium	NE	3,500	3,300	31,000	9,900	4,000	4,100	33,000	26,000	10,000	15,000
Total Chromium	100	3.5	0.58 J	6.5	320	14	1.2	<1.0	130	55	<10**
Cobalt	6*	25	25	91	37	18	16	20	37	31	<10**
Copper	1,300	5.1	4.7	1.3	37	6.8	3.4	2.3	58	110	12 J
Iron	14,000*	420	<50**	1,200	15,000	3,900	<100	900	18,000	43,000	<1,000**
Lead	15	1.1	0.56 J	<1.0	11	2.6	<0.5**	60	1,400	2,000	48
Magnesium	NE	2,000	2,800	14,000	3,400	1,400	1,600 J	25,000	19,000	9,700	19,000
Manganese	430*	140	140	880	310	140	110	300	260	210	110
Mercury	2	0.20 J	<0.1**	<0.20	1.0	0.70	<0.1**	<0.20	<4.0	<0.1**	<2**
Nickel (soluble salts)	390	41	36	230	230	25	26	33	95	32	<10**
Potassium	NE	800	750	2,600	3,000	1,400	1,300	9,600	9,400	12,000	13,000
Selenium	50	<0.5**	<0.5**	1.1	<1.0	<0.5**	<0.5**	3.0	2.4	2.0	<10**
Silver	94	<0.5**	<0.5**	<1.0	<1.0	<0.5**	<0.5**	<1.0	<20	<0.5**	<10**
Sodium	1,000	22,000	26,000	86,000	21,000	15,000	17,000	620,000	640,000	590,000	650,000
Thallium	2	<0.5**	<0.5**	<1.0	<1.0	<0.5**	<0.5**	<1.0	<20	<0.5**	<10**
Vanadium	86*	1.8	<0.5**	<5.0	51	18	<0.5**	<5.0	53	73	13 J
Zinc	6,000*	95	90	200	120	83	83	3,900	11,000	12,000	810

Table 7
Metals Groundwater Characterization Summary

Sample Identification	Comparison Value	EGW-9D		EGW-10				EGW-12			
		Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Sample Date	MCL (RSL as noted)	1/14/2015	1/29/2015	1/14/2015	1/29/2015	3/14/2018		1/14/2015	1/29/2015	3/15/2018	
Target Analyte List Metals	ug/L										
Aluminum	20,000*	870	<100	2,600	<100	280	<1,000**	<100	<100	<50.0	<50
Antimony	6	<5.0	<5.0	<5.0	<5.0	3.3 J	<50**	<5.0	<5.0	<2.5**	<2.5**
Arsenic	10	<1.0	<1.0	2.2	1.2	1.6	<10**	<1.0	<1.0	<0.5**	<0.5**
Barium	2,000	22	16	41	32	29	25	67	70	65	66
Beryllium	4	<1.0	<1.0	<1.0	<1.0	<0.5**	<10**	<1.0	<1.0	<0.5**	<0.5**
Cadmium	5	<1.0	<1.0	<1.0	<1.0	<0.5**	<10**	<1.0	<1.0	<0.5**	<0.5**
Calcium	NE	12,000	11,000	15,000	14,000	17,000	15,000	76,000	66,000	82,000	70,000
Total Chromium	100	31	<1.0	73	1.4	1.5	<10**	56	28	17	31
Cobalt	6*	1.3	<1.0	3.3	1.5	11	<10**	<1.0	<1.0	<0.5**	<0.5**
Copper	1,300	5.9	<1.0	18	8.6	11	<10**	1.7	1.4	1.0	0.76 J
Iron	14,000*	4,600	<100	7,800	<100	610	<1,000**	210	<100	<0.5**	<50**
Lead	15	13	<1.0	72	1.9	30	<10**	<1.0	<1.0	<0.5**	<0.5**
Magnesium	NE	3,300	3,400	23,000	22,000	13,000	15,000	9,900	8,900	12,000	15,000
Manganese	430*	280	220	43	29	320	15 J	10	6.1	13	8.3
Mercury	2	<0.20	<0.20	<0.20	<0.20	<0.1**	<2**	<0.20	<0.20	<0.1**	<0.1**
Nickel (soluble salts)	390	15	1.1	40	14	6.1	<10**	16	1.0	0.65 J	1.4
Potassium	NE	1,400	1,500	84,00	8,500	11,000	13,000	5,700	5,800	6,000	7,400
Selenium	50	1.2	1.7	3.0	4.3	2.9	<10**	9.7	13	12	12
Silver	94	<1.0	<1.0	<1.0	<1.0	<0.5**	<10**	<1.0	<1.0	<0.5**	<0.5**
Sodium	1,000	55,000	58,000	460,000	670,000	660,000	680,000	34,000	28,000	22,000	25,000
Thallium	2	<1.0	<1.0	<1.0	<1.0	<1.0	<10**	<1.0	<1.0	<0.5**	<0.5**
Vanadium	86*	26	<50	47	16	32	26	<5.0	<5.0	1.3	1.3
Zinc	6,000*	41	<20	210	60	93	<200**	<20	<20	14 J	13 J

Table 8
Soil Vapor Analysis Summary

Sample Identification	MDE Residential Comparison Values		GTA-SV-1	GTA-SV-2	GTA-SV-3	GTA-SV-4	GTA-SV-5	GTA-SV-5A	GTA-SV-5E	GTA-SV-5N	GTA-SV-5W	GTA-SV-5S	GTA-SV-5NE	GTA-SV-6	GTA-SV-7	GTA-SV-8	GTA-SV-9	GTA-SV-10	GTA-SV-11	GTA-SV-12
Sample Date	Tier 1 Target Soil Vapor Screening Values	Tier 2 Target Soil Vapor Screening Values	9/8/2017					3/15/2018						9/8/2017						
VOCs																				
1,1,1-Trichloroethane	104,000	520,000	<140 D	<41 D	<2.7	180	<200 D	<2.7	<2.7	<2.7	<27	<2.7	<2.7	15	<2.7	3.4	<2.7	<2.7	3.8	<2.7
1,1,2,2-Tetrachloroethane	9.6	48	<170 D	<51 D	<3.4	<3.4	<260 D	<3.4	<3.4	<3.4	<34	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	104,000	520,000	<190 D	<57 D	<3.8	<3.8	<290 D	<2.7	<2.7	<2.7	<27	<2.7	<2.7	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8
1,1,2-Trichloroethane	4.2	21	<140 D	<41 D	<2.7	<2.7	<200 D	<3.8	<3.8	<3.8	<38	<3.8	<3.8	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	6.5
1,1-Dichloroethane	360	1,800	<100 D	<30 D	<2.0	<2.0	<150 D	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	11	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	4,200	21,000	<99 D	<30 D	<2.0	<2.0	<150 D	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,4-Trichlorobenzene	42	210	<190 D	<56 D	<3.7	<3.7	<280 D	<3.7	<3.7	<3.7	<37	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7
1,2,4-Trimethylbenzene	1,260	6,300	<120 D	<37 D	<2.5	<2.5	<180 D	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<2.5	5.2	2.8	<2.5	<2.5	33	3.3
1,2-Dibromoethane (EDB)	0.94	4.7	<190 D	<58 D	<3.8	<3.8	<290 D	<3.8	<3.8	<3.8	<38	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8
1,2-Dichlorobenzene	4,200	21,000	<150 D	<45 D	<3.0	<3.0	<230 D	<3.0	<3.0	<3.0	<30	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
1,2-Dichloroethane	22	110	<100 D	<30 D	<2.0	<2.0	<150 D	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.1
Dichloroethene, trans-1,2-	1,260	6,300																		
1,2-Dichloropropane	84.0	420	<230 D	<69 D	<4.6	<4.6	<350 D	<4.6	<4.6	<4.6	<46	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6	<4.6
1,2-Dichlorotetrafluoroethane (Freon 114)	NE	NE	<170 D	<52 D	<3.5	<3.5	<260 D	<3.5	<3.5	<3.5	<35	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
1,3,5-Trimethylbenzene	1,260	6,300	<120 D	<37 D	<2.5	<2.5	<180 D	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	20	<2.5
1,3-Butadiene	18.8	94	<55 D	<17 D	<1.1	<1.1	<83 D	<1.1	<1.1	<1.1	<11	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1
1,3-Dichlorobenzene	NE	NE	<150 D	<45 D	<3.0	<3.0	<230 D	<3.0	<3.0	<3.0	<30	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
1,4-Dichlorobenzene	52	260	<150 D	<45 D	<3.0	<3.0	<230 D	<3.0	<3.0	<3.0	<30	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
1,4-Dioxane (P-Dioxane)	112	560	<450 D	<140 D	<9.0	<9.0	<680 D	<9.0	<9.0	<9.0	<90	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0	<9.0
2,2,4-Trimethylpentene	NE	NE	<120 D	<35 D	24	24	<180 D	<2.3	<2.3	<2.3	<23	<2.3	<2.3	12	7.9	11	<2.3	2.6	12	<2.3
2-Butanone (Methyl Ethyl Ketone)	104,000	520,000	<180 D	<55 D	6.3	8.4	<280 D	<3.7	7.6	<3.7	<37	<3.7	5.5	13	9.7	14	4.6	4.6	13	44
2-Hexanone (Methyl Butyl Ketone)	620	3,100	<260 D	<77 D	<5.1	<5.1	<380 D	<5.1	<5.1	<5.1	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
4-Ethyltoluene	NE	NE	<120 D	<37 D	<2.5	<2.5	<180 D	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.5	<2.5
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	62,000	310,000	<260 D	<77 D	<5.1	<5.1	<380 D	<5.1	<5.1	<5.1	<51	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1	<5.1
Acetone	640,000	3,200,000	<1200 D	<360 D	26	26	<1,800 D	<24	96	<24	<240	<24	69	61	49	99	<24	<24	110	59
Acrolein	0.84	4.2																		
Allyl Chloride (3-Chloropropene)	20	100	<78 D	<23 D	<1.6	<1.6	<120 D	<1.6	<1.6	<1.6	<16	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
Benzene	72	360	<80 D	<24 D	<1.6	<1.6	<120 D	<1.6	<1.6	<1.6	<16	<1.6	2.0	<1.6	<1.6	2.1	<1.6	<1.6	2.2	<1.6
Benzyl Chloride	11	57	<130 D	<39 D	<2.6	<2.6	<190 D	<2.6	<2.6	<2.6	<26	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6
Bromodichloromethane	15	76	<170 D	<50 D	5.0	<3.3	290 D	<3.3	<3.3	<3.3	<33	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3	<3.3
Bromoethene (Vinyl Bromide)	18	88	<110 D	<33 D	<2.2	<2.2	<160 D	<2.2	<2.2	<2.2	<22	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
Bromoform	520	2,600	<260 D	<78 D	<5.2	<5.2	<390 D	<5.2	<5.2	<5.2	<52	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2
Bromomethane	104	520	<97 D	<29 D	<1.9	<1.9	<150 D	<1.9	<1.9	<1.9	<19	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9	<1.9
Carbon Disulfide	14,600	73,000	<1600 D	<470 D	<31	<31	<2,300 D	<31	<31	<31	<310	<31	<31	<31	<31	<31	<31	<31	<31	<31
Carbon Tetrachloride	94	470	7,600 D	5,900 D	72	310 D	<240 D	<3.1	<3.1	6.1	<31	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	3.8	<3.1
Chlorobenzene	1,040	5,200	<120 D	<35 D	<2.3	<2.3	<170 D	<2.3	<2.3	<2.3	<23	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3
Chloroethane (Ethyl Chloride)	200,000	1,000,000	<66 D	<20 D	<1.3	<1.3	<99 D	<1.3	<1.3	<1.3	<13	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
Chloroform	24	120	1,400 D	720 D	97	320 D	2,300 D	<2.4	<2.4	3.8	<24	<2.4	9.4	<2.4	<2.4	2.7	3.4	<2.4	5.0	30
Chloromethane	1,880	9,400	<52 D	<15 D	<1.0	<1.0	<77 D	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cyclohexane	126,000	630,000	<86 D	<26 D	2.1	2.2	<130 D	<1.7	<1.7	<1.7	<17	<1.7	<1.7	<1.7	<1.7	2.1	<1.7	<1.7	<1.7	<1.7
Chlorodifluoromethane	1,060,000	5,300,000																		
Dibromochloromethane	NE	NE	<210 D	<64 D	<4.3	<4.3	<320 D	<4.3	<4.3	<4.3	<43	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3	<4.3
Dichlorodifluoromethane (Freon 12)	2,000	10,000	<120 D	<37 D	<2.5	380 D	<190 D	<2.5	<2.5	<2.5	<25	<2.5	<2.5	2.7	2.6	<2.5	<2.5	<2.5	<2.5	<2.5
Ethyl Acetate	1,460	7,300	<90 D	<27 D	<1.8	<1.8	<140 D	<1.8	<1.8	<1.8	<18	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Ethylbenzene	220	1,100	<110 D	<33 D	<2.2	<2.2	<160 D	<2.2	<2.2	<2.2	<22	<2.2	<2.2	4.6	<2.2	5.9	<2.2	<2.2	<2.2	4.4
Hexachlorobutadiene	26	130	<270 D	<80 D	<5.3	<5.3	<400 D	<5.3	<5.3	<5.3	<53	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3	<5.3
Isopropylbenzene (Cumene)	8,400	42,000	<120 D	<37 D	<2.5	<2.5	<180 D	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.9	<2.5
Methyl Acetate	NE	NE																		
Methyl-t-butyl ether	2,200	11,000	<230 D	<68 D	<4.5	<4.5	<340 D	<1.8	<1.8	<1.8	<18	<1.8	<1.8	<4.5	<4.5	11	<4.5	<4.5	<4.5	<4.5
Methyl Isobutyl Ketone (MIK)	64,000	320,000																		
Methylene Chloride	12,600	63,000	<1700 D	<520 D	<35	<35	<2,600 D	<35	<35	<35	<350	<35	<35	<35	<35	<35	<35	<35	<35	<35
Methylcyclohexane	NE	NE																		
Naphthalene	17	83	<130 D	<39 D	<2.6	<2.6	<200 D	<2.6	<2.6	<2.6	<26	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6	<2.6
Pentane	22,000	110,000																		
Propylene	62,000	310,000	<220 D	<65 D	<4.3	<4.3	<320 D	<4.3	<4.3	<4.3	<43	<4.3	<4.3	5.6	<4.3	<4.3	<4.3	<4.3	<4.3	55
Octane	NE	NE																		
Styrene	20,000	100,000	<530 D	<160 D	<11	<11	<800 D	<11	<11	<11	<110	<11	<11	<11	<11	<11	<11	<11	<11	<11
Tetrachloroethene (PCE)	840	4,200	810	2,400 D	12	1,600 D	380,000 DE	15	6.6	1,300	3,600	77	3.4	190	14	450	280	<3.4	29	9.2
Tertiary butyl alcohol	NE	NE																		
Tetrahydrofuran	42,000	210,000	<74 D	<22 D	<1.5	<1.5	<110 D	<1.5	<1.5	<1.5	<15	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	3.3
Toluene	104,000	520,000	<94 D	<28 D	3.2	<1.9	<140 D	<1.9	<1.9	<1.9	<19	<1.9	<1.9	2.5	2.7	7.0	<1.9	<1.9	6.9	7.0
Trichloroethene (TCE)	42	210	<130 D	<40 D	<2.7	5.2	23,000 D	<2.7	<2.7	<2.7	150	<2.7	<2.7	70	<2.7	30	33	<2.7	<2.7	<2.7
Trichlorofluoromethane (Freon 11)	14,600	73,000	<140 D	<42 D	<2.8	680 D	<210 D	<2.8	<2.8	<2.8	<28	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8	<2.8
Vinyl Acetate	4,200	21,000	<88 D	<26 D	<1.8	<1.8	<130 D	<1.8	<1.8	<1.8	<18	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Vinyl Chloride	34	170	<64 D	<19 D	<1.3	<1.3	<96 D	<1.3	<1.3	<1.3	<13	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3
cis-1,2-Dichloroethene	NE	NE	<99 D	<30 D	<2.0	<2.0	250	<2.0	<2.0	<2.0	<20	<2.0	11	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
cis-1,3-Dichloropropene [1]	140	700	<110 D	<34 D	<2.3	<2.3	<170 D	<2.3	<2.3	<2.3	<23	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3
m,p-Xylenes	2,000	10,000	<220 D	<65 D	<4.3	<4.3	<330 D	<2.2	<2.2	<2.2	<22	<2.2	<2.2	22	4.4	28	<4.3	<4.3	6.6	14
n-Heptane	8,400	42,000	<100 D	<31 D	4.3	3.3	<150 D	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	3.1	<2.0	<2.0	2.7	<2.0
n-Hexane	14,600	73,000	<1800 D	<530 D	<35	<35	<2600 D	<35	<35	<35	<350	<35	<35	<35	<35	<35	<35	<35	<35	<35
n-Propylbenzene	20,000	100,000	<120 D	<37 D	<2.5	<2.5	<180 D	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.2	<2.5
o-Xylene	2,000	10,000	<110 D	<33 D	<2.2	<2.2	<160 D	<2.2	<2.2	<2.2	<22	<2.2	<2.2	11	<2.2	11	<2.2	<2.2	9.0	3.8
trans-1,2-Dichloroethene	NE	NE	<99 D	<30 D	<2.0	<2.0	410 D	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene [1]	140	700	<110 D	<34 D	<2.3	<2.3	<170 D	<2.3	<2.3	<2.3	<23	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3	<2.3

Notes:
Results expressed in micrograms per cubic meter ($\mu g/m^3$)
Detected compounds shown in black
MDE = Maryland Department of the Environment
Shaded and bold values represent exceedance of MDE Tier 1 Target Soil Vapor screening values for residential land use
Shaded and bold values represent exceedance of MDE Tier 2 Target Soil Vapor screening values for residential land use
USEPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

RSL = Regional Screening Level, from USEPA November 2017
Adjusted RSL uses CR = 10^{-5} rather than 10^{-6}
NE = No published guidance value
CR = cancer risk (increase in cancer risk due to exposure to chemical of potential concern)
Non-carcinogens are expressed with hazard index (HI) = 1.0
[1] = The Adjusted RSLs in this table for these chemicals are for total 1,3-Dichloropropene.
The cis- and trans- components are not included in the USEPA RSL table.
D = Subject to Dilution
E = The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated

Sample Identification	MDE Residential Comparison Values		GTA-SV-13	GTA-SV-14	GTA-SV-15	GTA-SV-16	ESG-5	ESG-6	ESG-6 dup	ESG-7	ESG-9	ESG-11	ESG-16	ESG-17	ESG-18	ESG-20	ESG-20 dup	ESG-21	ESG-22	ESG-23	ESG-24
Sample Date	Tier 1 Target Soil Vapor Screening Values	Tier 2 Target Soil Vapor Screening Values	9/8/2017				12/20/2016			12/21/2016	8/17/2007	6/23/2010	8/17/2007						8/29/2007	9/11/2008	
VOCs																					
1,1,1-Trichloroethane	104,000	520,000	<2.7	<2.7	<2.7	<2.7	<1.1	<1.1	<1.1	<1.1	<1.1	<4.4	<1.1	<1.1	<1.1	<1.1	28 L	<16,000	<1.1	<8.7	
1,1,2,2-Tetrachloroethane	9.6	48	<3.4	<3.4	<3.4	<3.4	<1.4	<1.4	<1.4	<1.4	<1.4	<5.5	<1.4	<1.4	<1.4	<14	32 L	<21,000	<1.4	<11	
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	104,000	520,000	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<6.1	<3.8	4.4 J	<3.8	<38	-- L	<57,000	<3.8	<12	
1,1,2-Trichloroethane	4.2	21	<2.7	4.0	<2.7	5.3	<1.1	<1.1	<1.1	<1.1	<1.1	<4.4	<1.1	<1.1	39	<11	20 L	<16,000	<1.1	<8.7	
1,1-Dichloroethane	360	1,800	<2.0	<2.0	<2.0	<2.0	<0.81	<0.81	<0.81	<0.81	<0.81	<3.2	<0.81	<0.81	<0.81	<8.1	20 L	<12,000	<0.81	<6.5	
1,1-Dichloroethene	4,200	21,000	<2.0	<2.0	<2.0	<2.0	<0.79	<0.79	<0.79	<0.79	<0.79	<3.2	<0.79	<0.79	9.8	<7.9	20 L	<12,000	<0.79	<6.3	
1,2,4-Trichlorobenzene	42	210	<3.7	<3.7	<3.7	<3.7															
1,2,4-Trimethylbenzene	1,260	6,300	14	3.3	<2.5	14	2.3 J	1.7 J	1.5 J	1.4 J		16 B								<7.9	
1,2-Dibromoethane (EDB)	0.94	4.7	<3.8	<3.8	<3.8	<3.8	<1.5	<1.5	<1.5	<1.5		<6.1	<1.5	<1.5	<1.5	<15	28 L	<23,000	<1.5	<12	
1,2-Dichlorobenzene	4,200	21,000	<3.0	<3.0	<3.0	<3.0	<1.2	<1.2	<1.2	<1.2		<4.8	<1.2	<1.2	<1.2	<12	20 L	<18,000	<1.2	<9.6	
1,2-Dichloroethane	22	110	<2.0	<2.0	<2.0	2.7	<0.81	<0.81	<0.82	<0.81	<0.81	<3.2	<0.81	<0.81	<0.81	<8.1	18 L	<12,000	<0.81	<6.5	
Dichloroethene, trans-1,2-	1,260	6,300																			
1,2-Dichloropropane	84.0	420	<4.6	<4.6	<4.6	<4.6	<0.92	<0.92	<0.92	<0.92	<0.92	<3.7	<0.92	<0.92	<0.92	<9.2	20 L	<14,000	<0.92	<7.4	
1,2-Dichlorotetrafluoroethane (Freon 114)	NE	NE	<3.5	<3.5	<3.5	<3.5															
1,3,5-Trimethylbenzene	1,260	6,300	8.0	<2.5	<2.5	5.3	<0.98	<0.98	<0.98	<0.98		4.5 B									
1,3-Butadiene	18.8	94	<1.1	<1.1	<1.1	<1.1															
1,3-Dichlorobenzene	NE	NE	<3.0	<3.0	<3.0	<3.0	<1.2	<1.2	<1.3	<1.2	<1.2	8.4	14 K DL	<1.2 EST	9.4 EST	14 K EST	31 L EST	<18,000	<1.2	<9.6	
1,4-Dichlorobenzene	52	260	<3.0	<3.0	<3.0	<3.0	<1.2	<1.2	<1.4	<1.2	<1.2	<4.8	<1.2 EST	1.3 K EST	1.3 J	<12 EST	20 L EST	<18,000	<1.2	<9.6	
1,4-Dioxane (P-Dioxane)	112	560	<9.0	<9.0	<9.0	<9.0															
2,2,4-Trimethylpentene	NE	NE	<2.3	<2.3	<2.3	9.8	1 J	1 J	<0.93	1.2 J		2.7 J									
2-Butanone (Methyl Ethyl Ketone)	104,000	520,000	18	24	18	37	24	6	7	15	5.1 J	11	8.2	2.8 J	<1.5	46 J	29 L	<22,000	27	<4.7	
2-Hexanone (Methyl Butyl Ketone)	620	3,100	<5.1	<5.1	<5.1	20	<2.0	<2.0	<2.0	<2.0	<2.0	1.8	<2.0	2.7 J	8.2 J	<20	<20 L	<31,000	<2.0	<6.5	
4-Ethyltoluene	NE	NE	3.4	<2.5	<2.5	3.4	1.4 J	0.98	1.6 J	1.7 J		4.9 B								<7.9	
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	62,000	310,000	<5.1	<5.1	<5.1	<5.1	3.8 J	<2.0	<2.0	<2.0	5.3 J	2.7 J	84	<2.0	16 26 J		<20 L	<31,000	44		
Acetone	640,000	3,200,000	28	43	30	49	78	57 B	59 B	270	35	105	50	28	85 J	220	130 L	22,000 J	660	17	249
Acrolein	0.84	4.2					<0.79	5.3	3.2 J	4.1 J											
Allyl Chloride (3-Chloropropene)	20	100	<1.6	<1.6	<1.6	<1.6															
Benzene	72	360	<1.6	<1.6	<1.6	<1.6	1.8 J	3.4	2.2 J	4.2	1.4 J	11	16	1.6 J	160	110	30 L	<9,600	5.2	<5.1	3.2
Benzyl Chloride	11	57	<2.6	<2.6	<2.6	<2.6															
Bromodichloromethane	15	76	<3.3	<3.3	<3.3	<3.3	<1.7	<1.3	<1.3	<1.3	<1.3	<5.4	5 J	<1.3	5.2 J	<13	<13 L	<20,000	<1.3	<11	<11
Bromoethene (Vinyl Bromide)	18	88	<2.2	<2.2	<2.2	<2.2															<6.2
Bromoform	520	2,600	<5.2	<5.2	<5.2	<5.2															
Bromomethane	104	520	<1.9	<1.9	<1.9	<1.9	<0.78	<0.78	<0.78	<0.78	<0.78	<3.1	<0.78	<0.78	<0.78	<0.78	19 L	<12,000	<0.78	<6.2	
Carbon Disulfide	14,600	73,000	<31	<31	<31	<31	<0.62	<0.62	<0.62	5.2	0.72 J	6.9	200	0.75 J	69	160	82 L	18,000 J	3.9	20	<5.0
Carbon Tetrachloride	94	470	<3.1	<3.1	<3.1	<3.1	<1.3	<1.3	<1.3	<1.3	<1.3	81.8	<1.3	1.8 J	<1.3	33 J	37 L	<19,000	<1.3	<10	<10
Chlorobenzene	1,040	5,200	<2.3	<2.3	<2.3	<2.3	<0.92	<0.92	<0.92	<0.92	<0.92	<3.7	<0.92	<0.92	<0.92	<9.2	12 L	<14,000	<0.92	<7.4	<7.4
Chloroethane (Ethyl Chloride)	200,000	1,000,000	<1.3	<1.3	<1.3	<1.3															
Chloroform	24	120	7.3	14	22	5.7	<0.98	<0.98	<0.98	4.3 J	<0.98	7.8	51	4.8 J	48	53	30 L	160,000	<0.98	36	6.8
Chloromethane	1,880	9,400	<1.0	<1.0	<1.0	<1.0	1.3 J	1.3 J	0.99 J	2.6	2.1	<1.7	<0.41	2.4	<0.41	<4.1	21 L	<6,200	<0.41	<3.3	<3.3
Cyclohexane	126,000	630,000	<1.7	<1.7	<1.7	<1.7															
Chlorodifluoromethane	1,060,000	5,300,000																			<5.6
Dibromochloromethane	NE	NE	<4.3	<4.3	<4.3	<4.3															
Dichlorodifluoromethane (Freon 12)	2,000	10,000	<2.5	8.3	<2.5	<2.5	4.8 J	2.4 J	2.2 J	2.9 J		2.4 J									<7.9
Ethyl Acetate	1,460	7,300	<1.8	<1.8	<1.8	<1.8															
Ethylbenzene	220	1,100	2.4	5.8	<2.2	5.9	1.1 J	2 J	1.2 J	1.6 J	1.5 J	9.6 B	7.6	0.87	98	44	20 L	<13,000	2.5 J	<6.9	<6.9
Hexachlorobutadiene	26	130	<5.3	<5.3	<5.3	<5.3															
Isopropylbenzene (Cumene)	8,400	42,000	<2.5	<2.5	<2.5	<2.5	<0.98	3.9 J	<0.98	19	<0.98	<3.9	<0.98	<0.98	5.8	<9.8	<9.8 L	<15,000	<0.98	<7.9	<7.9
Methyl Acetate	NE	NE									DL		DL	DL	91 J	DL	DL	DL	DL		
Methyl-t-butyl ether	2,200	11,000	<4.5	<4.5	<4.5	<4.5	<0.72	<0.72	<0.72	<0.72	<0.72	<2.9	76	<0.72	410	210	<7.2 L		42	<5.8	<5.8
Methyl Isobutyl Ketone (MIK)	64,000	320,000																			
Methylene Chloride	12,600	63,000	<35	<35	<35	<35	0.87 J	8.3 B	<0.69	<0.69	<0.69	<2.8	13	20	1.1 J	56	65 L	17,000 J	1.8 J	<5.6	<5.6
Methylcyclohexane	NE	NE									DL	120 J	DL	DL	120 J	80 J	DL	DL	DL		
Naphthalene	17	83	<2.6	<2.6	<2.6	<2.6	<2.1	2.1 J	<2.1	<2.1	<2.1		<2.1	<2.1	<2.1	<2.1	<2.1 L	<310			
Pentane	22,000	110,000					4.1	9	4.5 J	6.5		23								<4.7	<4.7
Propylene	62,000	310,000	<4.3	<4.3	<4.3	6.5	<0.34	13	6.3 J	27											
Octane	NE	NE					2.4 J	3.2 J	1.7 J	3.7 J		7.9 B								<7.5	
Styrene	20,000	100,000	<11	<11	<11	<11	<0.85	<0.85	<0.85	<0.85	0.98 J	<3.4	4.1 J	<0.85	<0.85	13 J	19 L	<13,000	<0.85	<6.8	<6.8
Tetrachloroethene (PCE)	840	4,200	2,300 D	980 D	62	580 D	<1.4	5 J	2.1 J	4.5 J	2.8 J	1.5	87	--	50	15,000	2,800 L	7,500,000	<1.4	<11	<11
Tertiary butyl alcohol	NE	NE					12	7.2	14												
Tetrahydrofuran	42,000	210,000	<1.5	1.9	<1.5	<1.5															
Toluene	104,000	520,000	4.0	7.9	<1.9	5.6	8.2	11	9	6.5	7.4	34	68	70	950	580	96 L	14,000 J	16	11	8.7
Trichloroethene (TCE)	42	210	60	<2.7	<2.7	29		1.2 J	<1.1	500	1.5 J	<0.86	1,300	<1.1	250	3,100	850 L	1,200,000	<1.1	<8.6	<8.6
Trichlorofluoromethane (Freon 11)	14,600	73,000	<2.8	<2.8	<2.8	<2.8	1.1 J	2.1K	1.2 J	1.3 J	1.3 J	<4.5	1.9 J	15	3 J	<11	31 L	<17,000	1.6 J	<9.0	<9.0
Vinyl Acetate	4,200	21,000	<1.8	<1.8	<1.8	<1.8															
Vinyl Chloride	34	170	<1.3	<1.3	<1.3	<1.3	<0.51	<0.51	<0.51	<0.51	<0.51	<2.0	<0.51	<0.51	<0.51	<5.1	15 L	47,000	<0.51	<4.1	
cis-1,2-Dichloroethene	NE	NE	<2.0	<2.0	<2.0	3.2	<0.79	<0.79	<0.79	4.7	<0.79	<3.2	5.2	<0.79	55	7,900	1,700 L	870,000	13	--	<6.3
cis-1,3-Dichloropropene [1]	140	700	<2.3	<2.3	<2.3	<2.3	<0.91	<0.91	<0.91	<0.91	<0.91	<3.6	<0.91	<0.91	<0.91	<0.91	15 L	<14,000	<0.91	<7.3	<7.3
m,p-Xylenes	2,000	10,000	9.0	19	<4.3	20	3.4 J	7.1 J	3.8 J	3.9 J	5.3	33 B	14	1.3 J	150	61	37 L	<13,000	8.8	6.9	6.9
n-Heptane	8,400	42,000	<2.0	<2.0	<2.0	<2.0	4.3	1.8 J	1.9 J	2 J		7.4 B								<6.6	<7.8
n-Hexane	14,600	73,000	<35	<35	<35	<35	1.9 J	2.4 J	1.5 J	2.8 J		11 B								<5.6	<4.2
n-Propylbenzene	20,000	100,000	2.6	<2.5	<2.5	3.1															
o-Xylene	2,000	10,000	5.3	6.3	<2.2	9.1	1.3 J	2.6 J	1.6 J	1.5 J	2.3 J	12 B	9.7	1.1 J	71	37 J	22 L	<13,000	3.1 J	<6.9	<6.9
trans-1,2-Dichloroethene	NE	NE	<2.0	<2.0	<2.0	2.4	<0.79	<0.79	<0.79	1.5 J	<0.79	<3.2	<0.79	<0.79	<0.79	28 J	<7.9	59,000 J	<0.79	<6.3	<6.3
trans-1,3-Dichloropropene [1]	140	700	<2.3	<2.3	<2.3	<2.3	<0.91	<0.91	<0.91	<0.91	<1.1	<3.6	<0.91	<0.91	<0.91	<9.1	14 L	<14,000	<0.91	<7.3	<7.3

Notes:

Results expressed in micrograms per cubic meter ($\mu g/m^3$)
Detected compounds shown in black
MDE = Maryland Department of the Environment
Shaded and bold values represent exceedance of MDE Tier 1 Target Soil Vapor screening values for residential land use
Shaded and bold values represent exceedance of MDE Tier 2 Target Soil Vapor screening values for residential land use
USEPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

RSL = Regional Screening Level, from USEPA November 2017
Adjusted RSL uses CR = 10^{-5} rather than 10^{-6}
NE = No published guidance value
CR = cancer risk (increase in cancer risk due to exposure to chemical of potential concern)
Non-carcinogens are expressed with hazard index (HI) = 1.0
[1] = The Adjusted RSLs in this table for these chemicals are for total 1,3-Dichloropropene.
The cis- and trans- components are not included in the USEPA RSL table.
D = Subject to Dilution
E = The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated

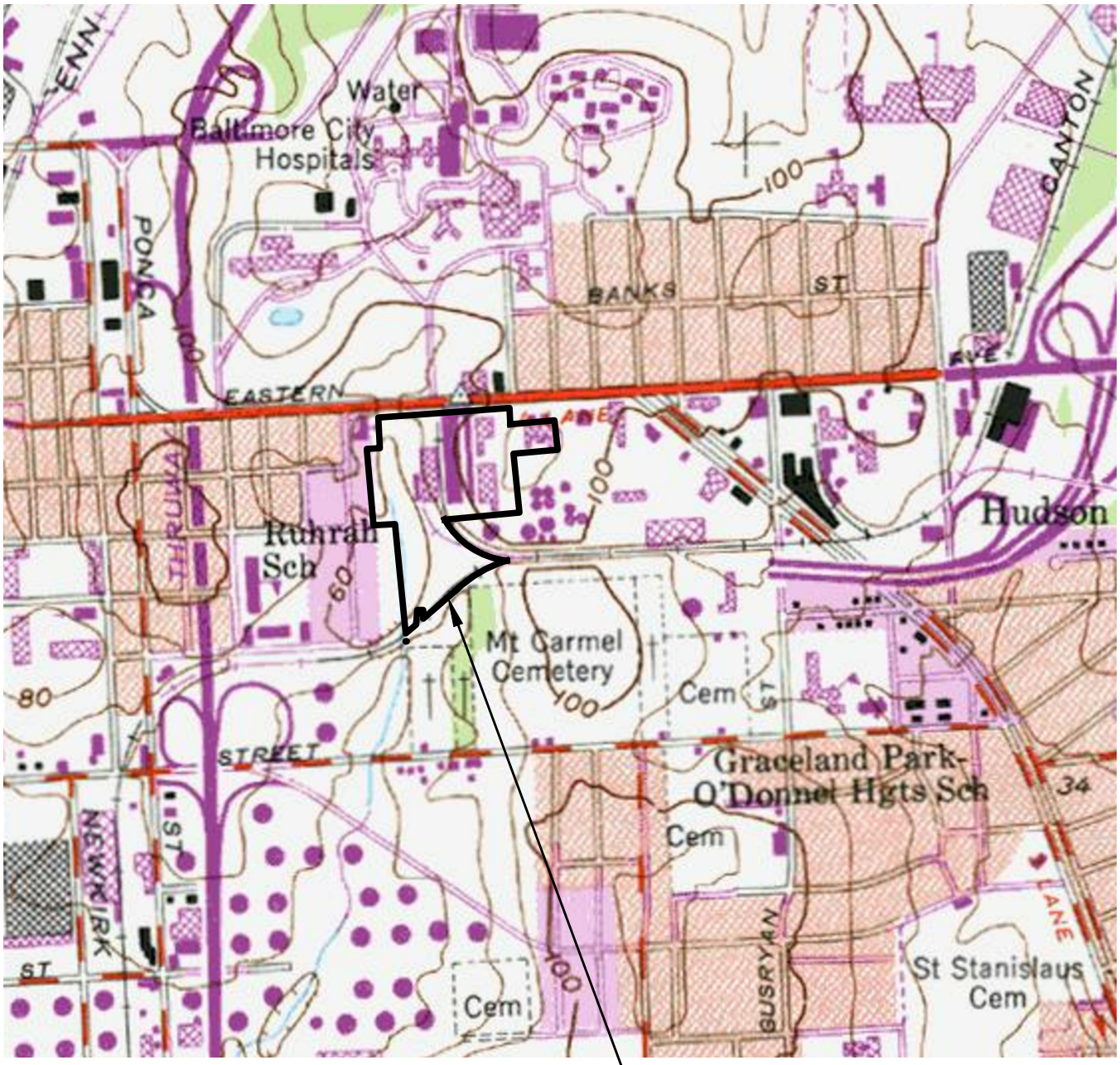
Table 8
Soil Vapor Analysis Summary

Sample Identification	MDE Residential Comparison Values		ESG-25	ESG-26	ESG-26 dup	ESG-26	ESG-27	ESG-28	ESG-29	ESG-30A	ESG-30A dup	ESG-31	ESG-32	ESG-32 DUP	ESG-33	ESG-34	ESG-34A	ESG-35
Sample Date	**Tier 1 Target Soil Vapor Screening Values**	**Tier 2 Target Soil Vapor Screening Values**	**9/11/2008**			**6/23/2010**	**9/11/2008**			**12/18/2009**			**6/23/2010**		**10/23/2013**			
VOCs																		
1,1,1-Trichloroethane	104,000	520,000	<8.7	<8.7	<8.7	<4.4	<8.7	<8.7	<8.7	<0.53	<0.53	<1.4	<4.4	<4.4				
1,1,2,2-Tetrachloroethane	9.6	48	<11	<11	<11	<5.5	<11	<11	<11	<0.62	<0.62	<1.6	<5.5	<5.5				
1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	104,000	520,000	<12	<12	<12	<6.1	<12	<12	<12	<0.67	<0.67	<1.7	<6.1	<6.1				
1,1,2-Trichloroethane	4.2	21	<8.7	<8.7	<8.7	<4.4	<8.7	<8.7	<8.7	<0.46	<0.46	<1.1		<4.4				
1,1-Dichloroethane	360	1,800	<6.5	<6.5	<6.5	<3.2	<6.5	<6.5	<6.5	<0.57	<0.57	<1.5	<3.2	<3.2				
1,1-Dichloroethene	4,200	21,000	<6.3	<6.3	<6.3	<3.2	<6.3	<6.3	<6.3	<0.71	<0.71	<1.7	<3.2	<3.2				
1,2,4-Trichlorobenzene	42	210																
1,2,4-Trimethylbenzene	1,260	6,300	<7.9	<7.9	<7.9	11 B	<7.9	<7.9	<7.9	11 J	6.9 J	18 J	16 B	14 B				
1,2-Dibromoethane (EDB)	0.94	4.7	<12	<12	<12	<6.1	<12	<12	<12	<0.63	<0.63	<1.6	<6.1	<6.1				
1,2-Dichlorobenzene	4,200	21,000	<9.6	<9.6	<9.6	<4.8	<9.6	<9.6	<9.6	<0.9	<0.9	<2.2	<4.8	<4.8				
1,2-Dichloroethane	22	110																
Dichloroethene, trans-1,2-	1,260	6,300	<6.3	<6.3	<6.3	<3.2	<6.3	<6.3	<6.3	<0.56	<0.56	<1.4	<3.2	<3.2				
1,2-Dichloropropane	84.0	420	<7.4	<7.4	<7.4	<3.7	<7.4	<7.4	<7.4	<0.51	<0.51	<1.3	<3.7	<3.7				
1,2-Dichlorotetrafluoroethane (Freon 114)	NE	NE																
1,3,5-Trimethylbenzene	1,260	6,300				3.1 B				2.5 J	2 J	4.8 J	4.6 B	3.6 B				
1,3-Butadiene	18.8	94																
1,3-Dichlorobenzene	NE	NE	<9.6	<9.6	<9.6	6.6	<9.6	<9.6	<9.6	<0.78	<0.78	<1.9	45	49				
1,4-Dichlorobenzene	52	260	<9.6	<9.6	<9.6	<4.8	<9.6	<9.6	<9.6	<0.78	<0.78	<1.9	<4.8	<4.8				
1,4-Dioxane (P-Dioxane)	112	560																
2,2,4-Trimethylpentene	NE	NE				<3.7				196	191	2,700	<3.7	<3.7				
2-Butanone (Methyl Ethyl Ketone)	104,000	520,000	33.3	8.3	5.3	<2.4	<4.7	<4.7	16	4.4	4.7	<1.2	24	25				
2-Hexanone (Methyl Butyl Ketone)	620	3,100	<6.5	<6.5	<6.5	<3.3	<6.5		<6.5	<0.49	<0.49	<1.2	<3.3	<3.3				
4-Ethyltoluene	NE	NE	<7.9	<7.9	<7.9	2.7 B	<7.9	<7.9	<7.9	<0.84	<0.84	<2.1	4.4 B	4.9 B				
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	62,000	310,000																
Acetone	640,000	3,200,000	587 J	249	212	13	67	121	461	18	17	<0.93	278	309				
Acrolein	0.84	4.2																
Allyl Chloride (3-Chloropropene)	20	100																
Benzene	72	360	6.7	<5.1	<5.1	<2.6	<5.1	<5.1	<5.1	33.5 J	33.2 J	696 J	3.8	4.2				
Benzyl Chloride	11	57																
Bromodichloromethane	15	76	<11	<11	<11	<5.4	<11	<11	<11	<7.4	<7.4	<1.9	<5.4	<5.4				
Bromoethene (Vinyl Bromide)	18	88																
Bromoform	520	2,600																
Bromomethane	104	520	<6.2	<6.2	<6.2	<3.1	<6.2	<6.2	<6.2	<0.37	<0.37	<0.93	<3.1	<3.1				
Carbon Disulfide	14,600	73,000	14	<5.0	<5.0	<2.5	<5.0	<5.0	<5.0	<0.04	<0.04	<1.1	9.7 J	<2.5 U,J				
Carbon Tetrachloride	94	470	<10.0	176	159	97.5	<10	<10	<10	<0.55	<0.55	<1.4	3 J	3.1 J				
Chlorobenzene	1,040	5,200	<7.4	<7.4	<7.4	<3.7	<7.4	<7.4	<7.4	<0.46	<0.46	<1.2	2 J	<3.7				
Chloroethane (Ethyl Chloride)	200,000	1,000,000																
Chloroform	24	120	23	11	10	6.8	<7.8	<7.8	<7.8	<0.54	<0.54		<3.9	<3.9				
Chloromethane	1,880	9,400	<3.3	<3.3	<3.3	<1.7	<3.3	<3.3	<3.3	<0.39	<0.39	<0.97	2.3	1.9				
Cyclohexane	126,000	630,000																
Chlorodifluoromethane	1,060,000	5,300,000	<5.6	<5.6	<5.6	<2.8	<5.6	<5.6	<5.6	<0.67	<0.67	<1.6	<2.8	<2.8				
Dibromochloromethane	NE	NE																
Dichlorodifluoromethane (Freon 12)	2,000	10,000	<7.9	<7.9	<7.9	2.7 J	<7.9	<7.9	<7.9	2.4 J	2.6 J	<1.2	2.9 J	2.6 J				
Ethyl Acetate	1,460	7,300																
Ethylbenzene	220	1,100	4 J	<6.9	<6.9	2.9 B	<6.9	<6.9	<6.9	2.9 J	5.2 J	28 J	6.5 B	6.1 B				
Hexachlorobutadiene	26	130																
Isopropylbenzene (Cumene)	8,400	42,000	<7.9	<7.9	<7.9	<7.9	<3.9	<7.9	<7.9	0.88 J	<0.39	<0.98	<3.9	<3.9				
Methyl Acetate	NE	NE																
Methyl-t-butyl ether	2,200	11,000	11	<5.8	<5.8	<2.9	<5.8	<5.8	<5.8	<0.32	<0.32	<0.79	<2.9	<2.9				
Methyl Isobutyl Ketone (MIK)	64,000	320,000				<3.3				<0.74	<0.74	<1.8	2.3 J	<3.3				
Methylene Chloride	12,600	63,000	<5.6	<5.6	<5.6	<2.8	16	<5.6	<5.6	<0.35	<0.35	<0.87	<2.8	<2.8				
Methylcyclohexane	NE	NE																
Naphthalene	17	83																
Pentane	22,000	110,000	<4.7	<4.7	<4.7	<2.4	<4.7		<4.7	<0.32	<0.32	<0.82	<2.4	<2.4				
Propylene	62,000	310,000																
Octane	NE	NE	<7.5	<7.5	<7.5	<3.7	<7.5	<7.5	<7.5	<0.43	<0.43	<1.1	6.1 B	8.4 B				
Styrene	20,000	100,000	<6.8	<6.8	<6.8	<3.4	<6.8	<6.8	<6.8	<0.32	<0.32	<0.77	<3.4	<3.4				
Tetrachloroethene (PCE)	840	4,200	27	27	22	47	11	<11	15						122	101	20.1	1,140,000
Tertiary butyl alcohol	NE	NE																
Tetrahydrofuran	42,000	210,000																
Toluene	104,000	520,000	9.8	4.9 J	4.9 J	6 B	6.4	<6.0	6.4	24 J	31	656 J	20	19				
Trichloroethene (TCE)	42	210	<8.6	<8.6	<8.6	2.4	<8.6	6.4 J	<8.6	<0.4	1.4 J	<1	<0.86	<0.86	24.5	11.2	6.02	146,000
Trichlorofluoromethane (Freon 11)	14,600	73,000	<9.0	<9.0	<9.0	<4.5	7.3 J	<9.0	<9.0	<0.48	<0.48	<1.2	3 J	<4.5				
Vinyl Acetate	4,200	21,000																
Vinyl Chloride	34	170	<4.1	<4.1	<4.1	<2.0	<4.1	<4.1	<4.1	<0.24	<0.24	<0.59	<2.0	<2.0				
cis-1,2-Dichloroethene	NE	NE	<6.3	<6.3	<6.3	<3.2	<6.3	<6.3	<6.3	<0.44	<0.44	<1.1	<3.2	<3.2				
cis-1,3-Dichloropropene [(1)]	140	700	<7.3	<7.3	<7.3	<3.6	<7.3	<7.3	<7.3	<0.35	<0.35	<0.86	<3.6	<3.6				
m,p-Xylenes	2,000	10,000	10	6.1 J	5.6 J	10 B	6.9	<6.9	6.9	9.6 J	17 J	73.4 J	23 B	23 B				
n-Heptane	8,400	42,000	20	<6.6	<6.6	<3.3	<6.6	<6.6	<6.6	72.5 J	78.3 J	1,020 J	2.4 B	2.4 B				
n-Hexane	14,600	73,000	15	<5.6	<5.6	<2.8	<5.6	<5.6	<5.6	182 J	178 J	1,910	3.2 B	3.5 B				
n-Propylbenzene	20,000	100,000																
o-Xylene	2,000	10,000	<6.9	<6.9	<6.9	4.3 B	<6.9	<6.9	<6.9	4.3 J	6.5 J	20 J	9.1 B	8.7 B				
trans-1,2-Dichloroethene	NE	NE																
trans-1,3-Dichloropropene [(1)]	140	700	<7.3	<7.3	<7.3	<3.6	<7.3	<7.3	<7.3	<0.29	<0.29	<0.73	<3.6	<3.6				

Notes:
Results expressed in micrograms per cubic meter ($\mu g/m^3$)
Detected compounds shown in black
MDE = Maryland Department of the Environment
Shaded and bold values represent exceedance of MDE Tier 1 Target Soil Vapor screening values for residential land use
Shaded and bold values represent exceedance of MDE Tier 2 Target Soil Vapor screening values for residential land use
USEPA = United States Environmental Protection Agency
VOCs = Volatile Organic Compounds

RSL = Regional Screening Level, from USEPA November 2017
Adjusted RSL uses CR = 10^{-5} rather than 10^{-6}
NE = No published guidance value
CR = cancer risk (increase in cancer risk due to exposure to chemical of potential concern)
Non-carcinogens are expressed with hazard index (HI) = 1.0
[(1)] = The Adjusted RSLs in this table for these chemicals are for total 1,3-Dichloropropene.
The cis- and trans- components are not included in the USEPA RSL table.
D = Subject to Dilution
E = The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated

Figures



NOTES

1. BASED ON THE USGS BALTIMORE EAST, MD 7.5 MINUTE QUADRANGLE MAP.
2. COPYRIGHT 2013 MYTOPO, INC.

0 500 1,000
APPROXIMATE SCALE
1 INCH = 1,000 FEET

NORTH

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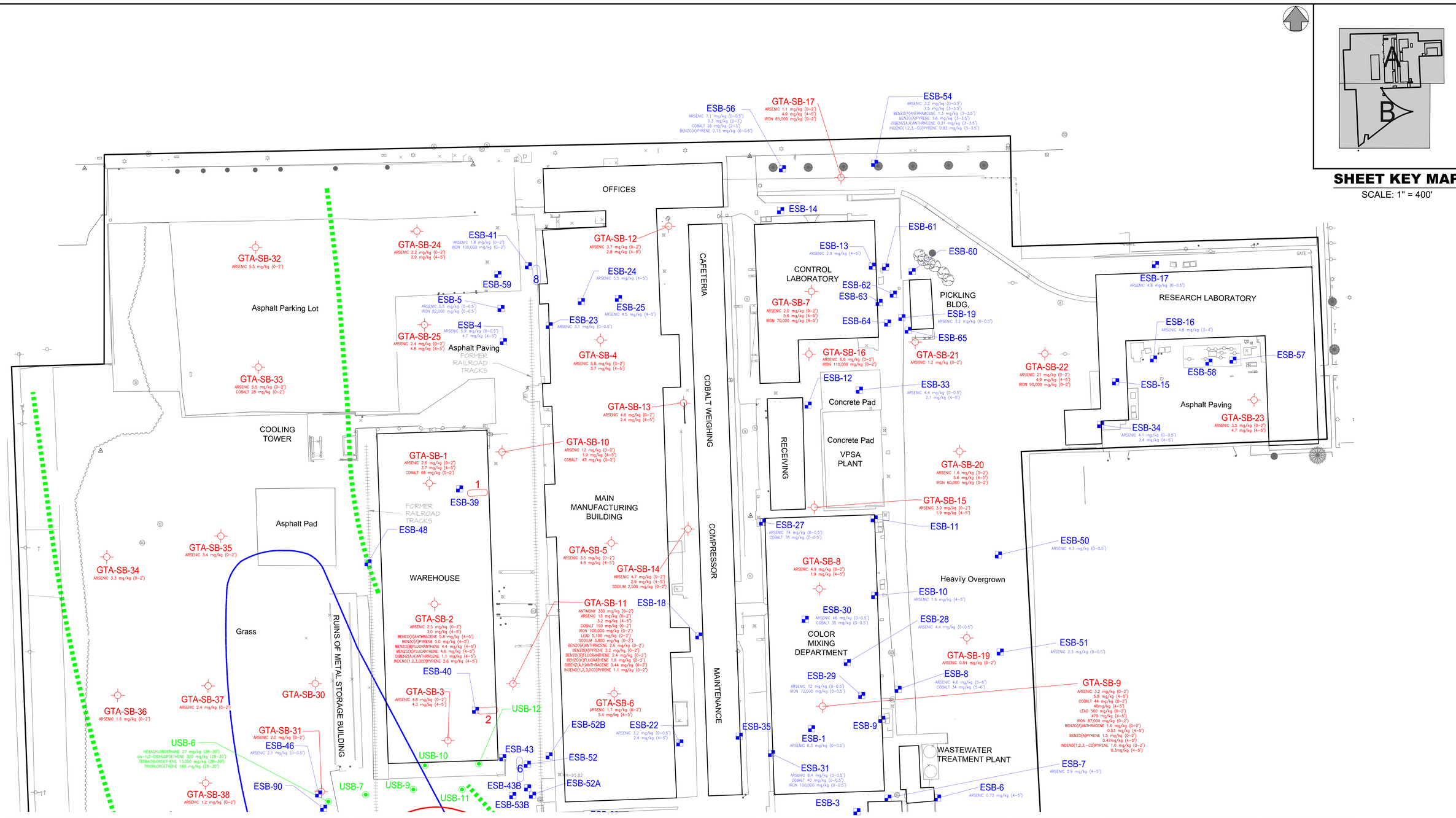
5601 EASTERN AVENUE
BALTIMORE CITY, MARYLAND

SITE LOCATION MAP

PROJECT: 140080	DATE: OCTOBER 2015	SCALE: 1" = 1,000'	DESIGN BY: MDP	REVIEW BY: KPP	FIGURE: 1



MATCHLINE (SEE SHEET 2B FOR CONTINUATION)

SHEET KEY MAP

SCALE: 1" = 400'

LEGEND:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- ESB-59 — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013)
- ESB-59 (ARSENIC 5.3 mg/kg) — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013) EXCEEDANCES OF THE USEPA REGION 3 RESIDENTIAL RSLS
- USB-7 — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (URBAN GREEN, 2013)
- USB-7 (ARSENIC 5.3 mg/kg) — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (URBAN GREEN, 2013) EXCEEDANCES OF THE USEPA REGION 3 RESIDENTIAL RSLS
- GTA-SB-30 — SOIL SAMPLE LOCATIONS PERFORMED BY GTA
- GTA-SB-31 (ARSENIC 5.3 mg/kg) — SOIL SAMPLE LOCATIONS PERFORMED BY GTA EXCEEDANCES OF THE USEPA REGION 3 RESIDENTIAL RSLS
- APPROXIMATE EXTENT OF CRYSTAL HILL
- APPROXIMATE EXTENT OF VOC IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- APPROXIMATE EXTENT OF METHANE IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- 1 — USTS REPORTEDLY CLOSED IN PLACE:
  - 1 - 500-GALLON #2 OIL
  - 2 - 500-GALLON #2 OIL
  - 3 - 12,000-GALLON #2 OIL
  - 4 - 12,000-GALLON #2 OIL
  - 5 - 12,000-GALLON #2 OIL
- 8 — USTS REPORTEDLY REMOVED:
  - 6 - 1,000-GALLON DIESEL FUEL
  - 7 - 500-GALLON GASOLINE
  - 8 - #2 OIL, UNKNOWN CAPACITY

NOTES:

1. BASED ON PLANS PROVIDED BY MORRIS & RITCHIE ASSOCIATES, INC. (MRA), SAMPLE LOCATION PLANS PREPARED BY OTHERS, AND SITE OBSERVATIONS.
2. PROPERTY BOUNDARIES AND SITE FEATURES ARE APPROXIMATE.
3. REFER TO THE *SVOCS AND PCBS SOIL CHARACTERIZATION SUMMARY TABLE* (*TABLE 4*), THE *VOCS SOIL CHARACTERIZATION SUMMARY TABLE (TABLE 3)*, AND THE *METALS SOIL CHARACTERIZATION SUMMARY TABLE* (*TABLE 5*) FOR COMPLETE SOIL DATA SUMMARY.
4. GTA'S SAMPLE LOCATIONS WERE SELECTED AND STAKED IN THE FIELD BY GTA USING A HANDHELD GPS UNIT. GTA'S SAMPLE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

0' 10' 20' 30' 60'

SCALE: 1"=30'

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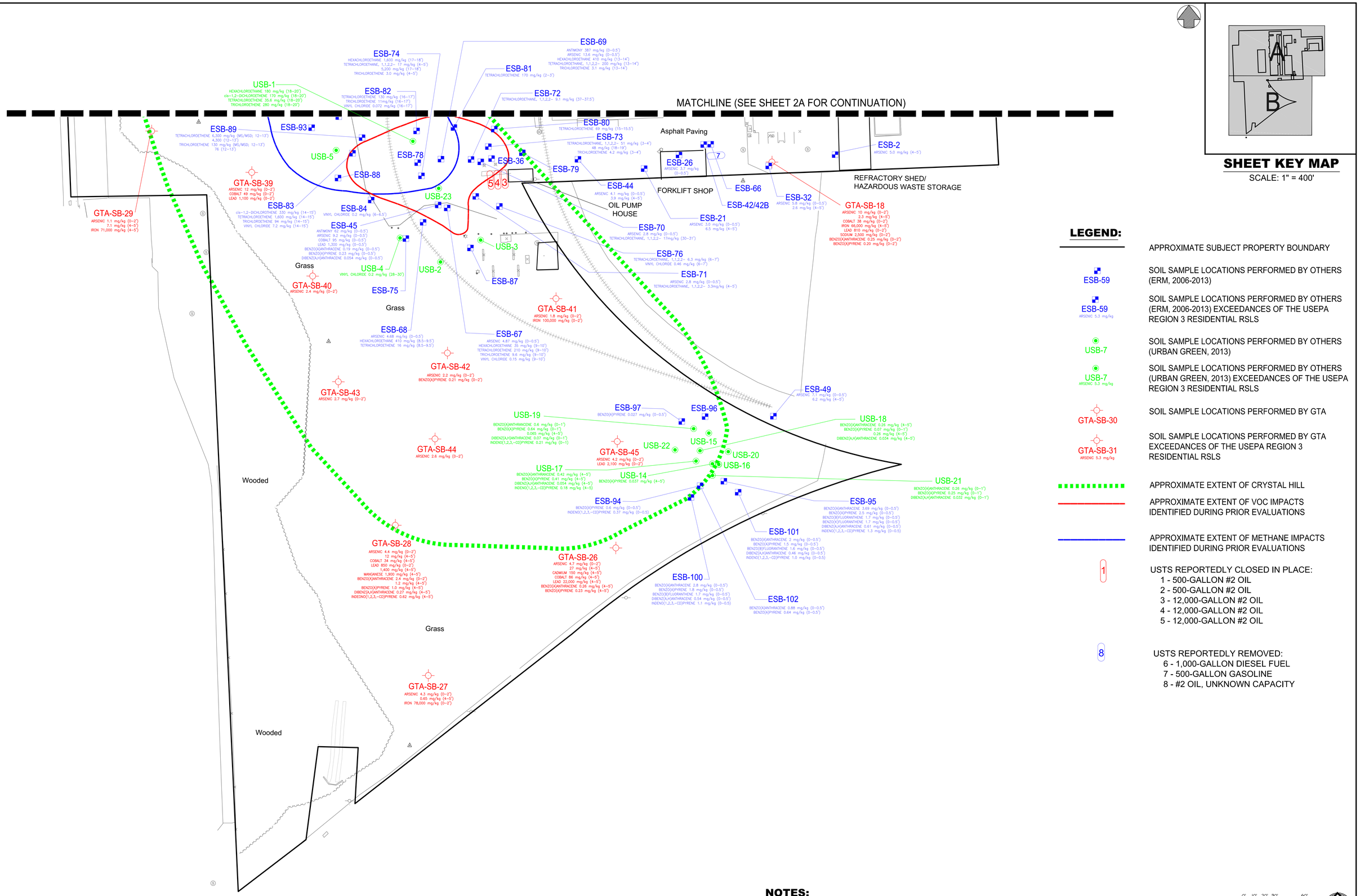
FIGURE 2A

5601 EASTERN AVENUE

BALTIMORE CITY, MARYLAND

SOIL SAMPLE LOCATION PLAN

PROJECT: 140080	DATE: OCTOBER 2015	SCALE: 1" = 30'	DESIGN BY: MDP	REVIEW BY: KPP	FIGURE: 6a



SHEET KEY MAP

SCALE: 1" = 400'

LEGEND:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- ESB-59 — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013)
- ESB-59 (ARSENIC 5.3 mg/kg) — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013) EXCEEDANCES OF THE USEPA REGION 3 RESIDENTIAL RSLS
- USB-7 — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (URBAN GREEN, 2013)
- USB-7 (ARSENIC 5.3 mg/kg) — SOIL SAMPLE LOCATIONS PERFORMED BY OTHERS (URBAN GREEN, 2013) EXCEEDANCES OF THE USEPA REGION 3 RESIDENTIAL RSLS
- GTA-SB-30 — SOIL SAMPLE LOCATIONS PERFORMED BY GTA
- GTA-SB-31 (ARSENIC 5.3 mg/kg) — SOIL SAMPLE LOCATIONS PERFORMED BY GTA EXCEEDANCES OF THE USEPA REGION 3 RESIDENTIAL RSLS
- APPROXIMATE EXTENT OF CRYSTAL HILL
- APPROXIMATE EXTENT OF VOC IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- APPROXIMATE EXTENT OF METHANE IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- 1 — USTS REPORTEDLY CLOSED IN PLACE:
  - 1 - 500-GALLON #2 OIL
  - 2 - 500-GALLON #2 OIL
  - 3 - 12,000-GALLON #2 OIL
  - 4 - 12,000-GALLON #2 OIL
  - 5 - 12,000-GALLON #2 OIL
- 8 — USTS REPORTEDLY REMOVED:
  - 6 - 1,000-GALLON DIESEL FUEL
  - 7 - 500-GALLON GASOLINE
  - 8 - #2 OIL, UNKNOWN CAPACITY

NOTES:

1. BASED ON PLANS PROVIDED BY MORRIS & RITCHIE ASSOCIATES, INC. (MRA), SAMPLE LOCATION PLANS PREPARED BY OTHERS, AND SITE OBSERVATIONS.
2. PROPERTY BOUNDARIES AND SITE FEATURES ARE APPROXIMATE.
3. REFER TO THE *SVOCS AND PCBS SOIL CHARACTERIZATION SUMMARY TABLE* (*TABLE 4*), THE *VOCS SOIL CHARACTERIZATION SUMMARY TABLE (TABLE 3)*, AND THE *METALS SOIL CHARACTERIZATION SUMMARY TABLE* (*TABLE 5*) FOR COMPLETE SOIL DATA SUMMARY.
4. GTA'S SAMPLE LOCATIONS WERE SELECTED AND STAKED IN THE FIELD BY GTA USING A HANDHELD GPS UNIT. GTA'S SAMPLE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

0' 10' 20' 30' 60'

SCALE: 1"=30'

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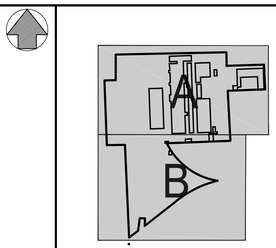
FIGURE 2B

5601 EASTERN AVENUE

BALTIMORE CITY, MARYLAND

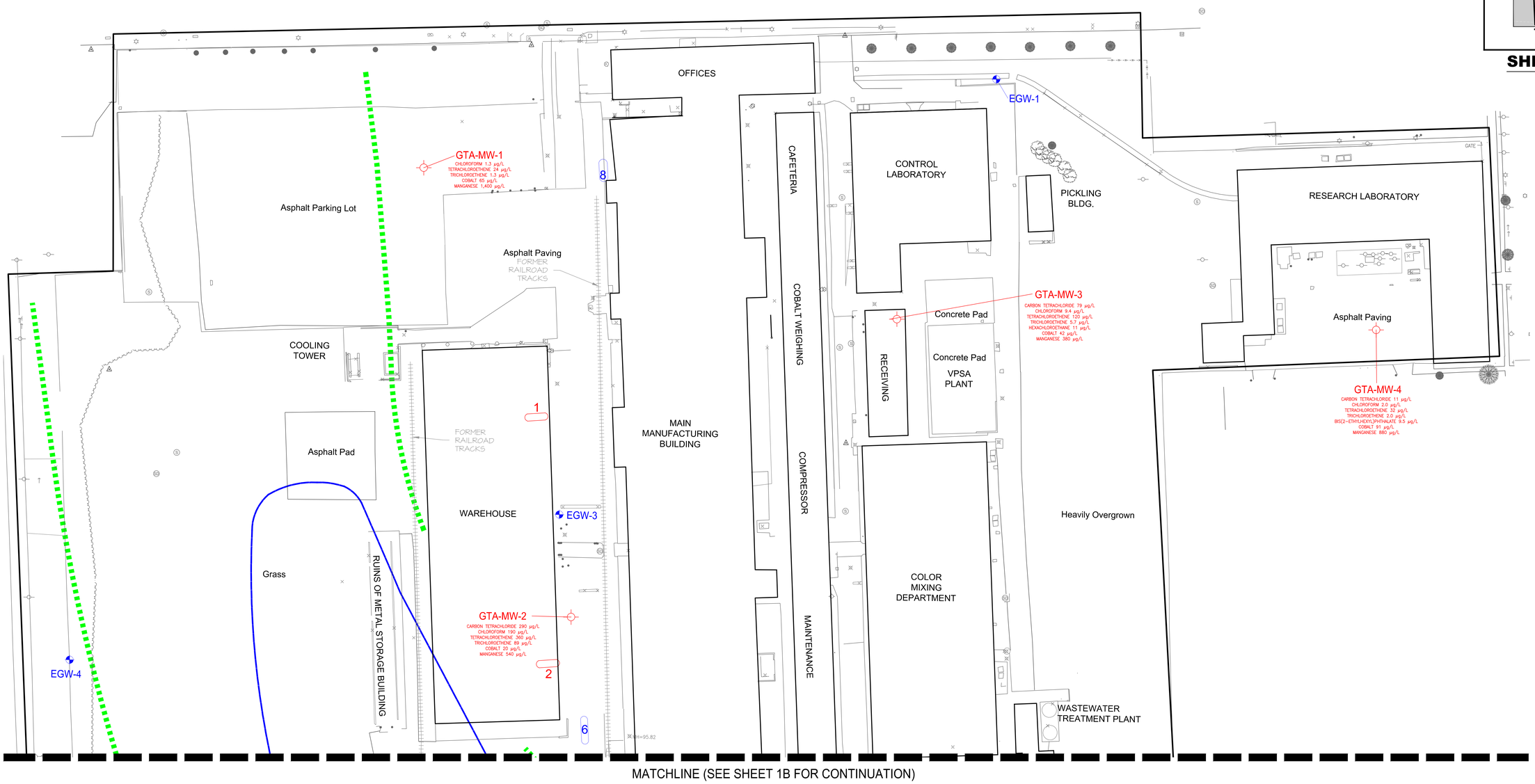
SOIL SAMPLE LOCATION PLAN

PROJECT: 140080	DATE: OCTOBER 2015	SCALE: 1" = 30'	DESIGN BY: MDP	REVIEW BY: KPP	FIGURE: 6b



SHEET KEY MAP

SCALE: 1" = 400'



MATCHLINE (SEE SHEET 1B FOR CONTINUATION)

LEGEND:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- EGW-9D — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013)
- EGW-10 (ACROLEIN 5.3 µg/L) — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013) EXCEEDANCES OF THE USEPA REGION 3 TAPWATER RSLS COMPARISON VALUES
- GTA-MW-1 — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY GTA (DECEMBER 18 - 20, 2014)
- GTA-MW-1 (ACROLEIN 5.3 µg/L) — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY GTA (DECEMBER 18 - 20, 2014) EXCEEDANCES OF THE USEPA REGION 3 TAPWATER RSLS COMPARISON VALUES
- APPROXIMATE EXTENT OF CRYSTAL HILL
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- APPROXIMATE EXTENT OF METHANE IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
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  - 3 - 12,000-GALLON #2 OIL
  - 4 - 12,000-GALLON #2 OIL
  - 5 - 12,000-GALLON #2 OIL
- 8 — USTS REPORTEDLY REMOVED:
  - 6 - 1,000-GALLON DIESEL FUEL
  - 7 - 500-GALLON GASOLINE
  - 8 - #2 OIL, UNKNOWN CAPACITY

NOTES:

1. BASED ON PLANS PROVIDED BY MORRIS & RITCHIE ASSOCIATES, INC. (MRA), SAMPLE LOCATION PLANS PREPARED BY OTHERS, AND SITE OBSERVATIONS.
2. PROPERTY BOUNDARIES AND SITE FEATURES ARE APPROXIMATE.
3. REFER TO THE *AGGREGATE VOC AND SVOC GROUNDWATER CHARACTERIZATION SUMMARY TABLE* (*TABLE 6*) AND THE *METALS GROUNDWATER CHARACTERIZATION SUMMARY TABLE* (*TABLE 7*) FOR COMPLETE GROUNDWATER DATA SUMMARY.
4. GTA'S SAMPLE LOCATIONS WERE SELECTED AND STAKED IN THE FIELD BY GTA USING A HANDHELD GPS UNIT. GTA'S SAMPLE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

0' 10' 20' 30' 60'

SCALE: 1"=30'

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FIGURE 3A

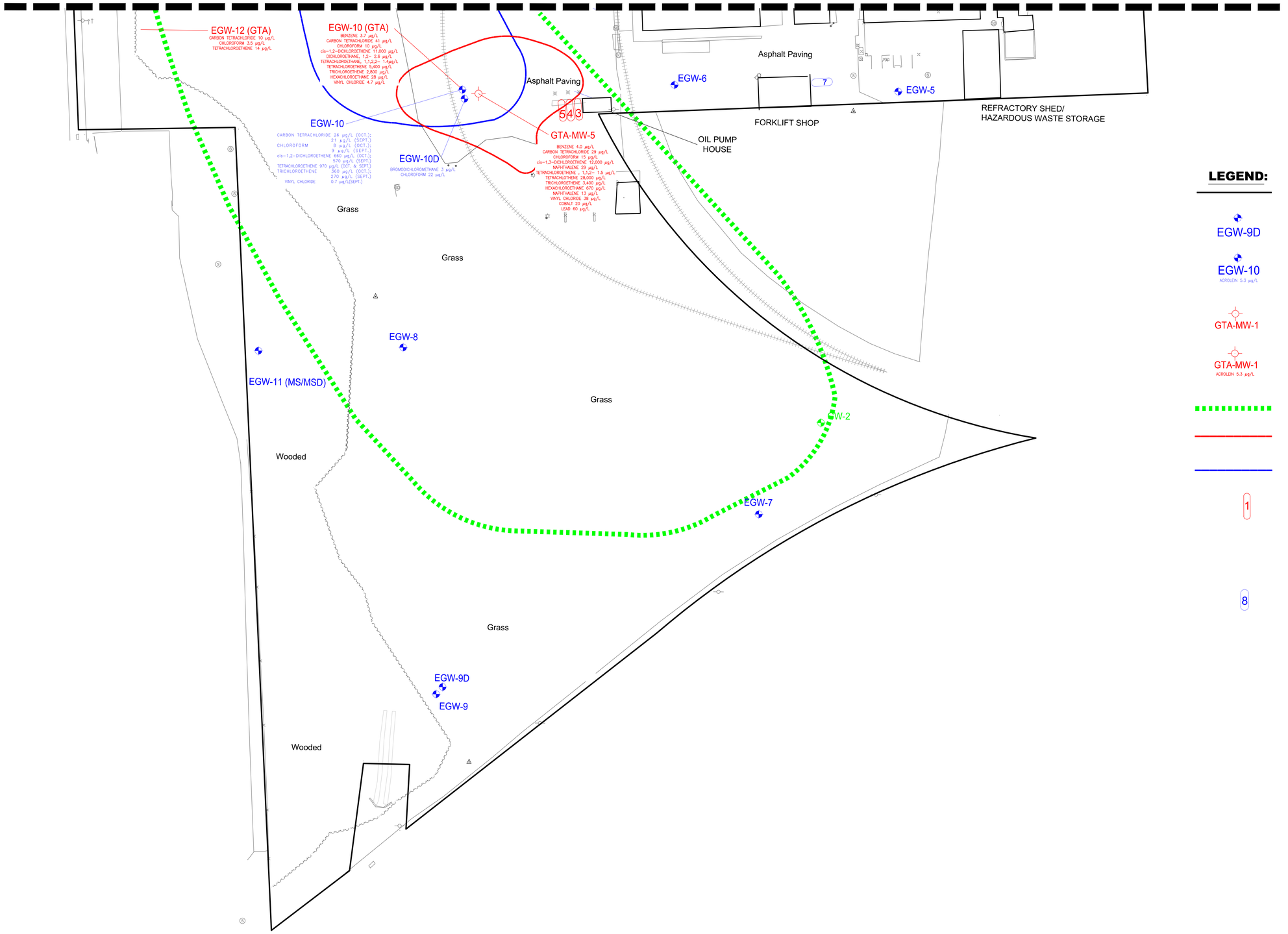
5601 EASTERN AVENUE

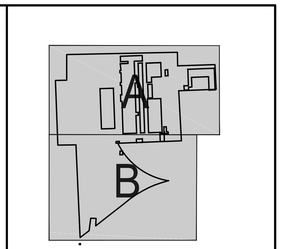
BALTIMORE CITY, MARYLAND

GROUNDWATER SAMPLE LOCATION PLAN

PROJECT: 140080	DATE: OCTOBER 2015	SCALE: 1" = 30'	DESIGN BY: MDP	REVIEW BY: KPP	FIGURE: 7a

MATCHLINE (SEE SHEET 1A FOR CONTINUATION)





SHEET KEY MAP

SCALE: 1" = 400'

LEGEND:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- EGW-9D — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013)
- EGW-10 (ACROLEIN 5.3 µg/L) — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013) EXCEEDANCES OF THE USEPA REGION 3 TAPWATER RSLS COMPARISON VALUES
- GTA-MW-1 — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY GTA (DECEMBER 18 - 20, 2014)
- GTA-MW-1 (ACROLEIN 5.3 µg/L) — GROUNDWATER SAMPLE LOCATIONS PERFORMED BY GTA (DECEMBER 18 - 20, 2014) EXCEEDANCES OF THE USEPA REGION 3 TAPWATER RSLS COMPARISON VALUES
- APPROXIMATE EXTENT OF CRYSTAL HILL
- APPROXIMATE EXTENT OF VOC IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- APPROXIMATE EXTENT OF METHANE IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- 1 — USTS REPORTEDLY CLOSED IN PLACE:
  - 1 - 500-GALLON #2 OIL
  - 2 - 500-GALLON #2 OIL
  - 3 - 12,000-GALLON #2 OIL
  - 4 - 12,000-GALLON #2 OIL
  - 5 - 12,000-GALLON #2 OIL
- 8 — USTS REPORTEDLY REMOVED:
  - 6 - 1,000-GALLON DIESEL FUEL
  - 7 - 500-GALLON GASOLINE
  - 8 - #2 OIL, UNKNOWN CAPACITY

NOTES:

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SCALE: 1"=30'

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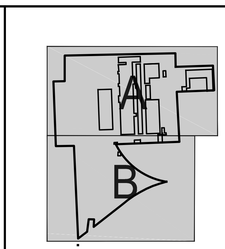
FIGURE 3B

5601 EASTERN AVENUE

BALTIMORE CITY, MARYLAND

GROUNDWATER SAMPLE LOCATION PLAN

PROJECT: 140080	DATE: OCTOBER 2015	SCALE: 1" = 30'	DESIGN BY: MDP	REVIEW BY: KPP	FIGURE: 7b



SHEET KEY MAP

SCALE: 1" = 400'

ESG-25
OFFICES
GTA-SV-3
ESG-24
ESG-23
CHLOROFORM 36 µg/m³
8
GTA-SV-6
CONTROL LABORATORY
GTA-SV-10
ESG-7
ACROLEIN 4.1 µg/m³
TRICHLOROETHENE 500 µg/m³
PICKLING BLDG.
RESEARCH LABORATORY
GTA-SV-11
ESG-5
GTA-SV-16
Asphalt Paving
Asphalt Parking Lot
GTA-SV-12
GTA-SV-13
Asphalt Paving
FORMER RAILROAD TRACKS
CAFETERIA
COBALT WEIGHING
GTA-SV-4
ESG-16
CHLOROFORM 51 µg/m³
TRICHLOROETHENE 1,300 µg/m³
GTA-SV-15
Concrete Pad
Concrete Pad
VPSA PLANT
RECEIVING
COOLING TOWER
ESG-1
1
MAIN MANUFACTURING BUILDING
ESG-17
COMPRESSOR
Asphalt Pad
FORMER RAILROAD TRACKS
GTA-SV-1
WAREHOUSE
Heavily Overgrown
GTA-SB-37
ESG-13
Grass
RUINS OF METAL STORAGE BUILDING
GTA-SV-8
COLOR MIXING DEPARTMENT
ESG-6/8
ACROLEIN 5.3 µg/m³
GTA-SV-5
ESG-10
ESG-18
BENZENE 160 µg/m³
CHLOROFORM 48 µg/m³
TRICHLOROETHENE, 1,1,1- 39 µg/m³
TRICHLOROETHENE 250 µg/m³
ESG-11
ESG-2
ESG-14
GTA-SV-2
GTA-SV-9
ESG-8
ESG-12
2
ESG-33
ESG-9
MAINTENANCE
GTA-SV-7
WASTEWATER TREATMENT PLANT
ESG-31
BENZENE 696 µg/m³
6
ESG-35
TETRACHLOROETHENE 1,140,000 µg/m³
TRICHLOROETHENE 140,000 µg/m³
ESG-34
ESG-26
EX. STORM MANHOLE=95.82
EX. STORM MANHOLE=91.86

MATCHLINE (SEE SHEET 3B FOR CONTINUATION)

LEGEND:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- ESG-6 (ACROLEIN 5.3 µg/m³) — ERM SOIL VAPOR SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013) EXCEEDANCES OF THE RESIDENTIAL COMPARISON VALUES FOR TIER I SOIL VAPOR
- GTA-SV-1 — PROPOSED GTA SOIL VAPOR SAMPLE LOCATIONS (TO BE PERFORMED DURING RAP)
- APPROXIMATE EXTENT OF CRYSTAL HILL
- APPROXIMATE EXTENT OF VOC IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- APPROXIMATE EXTENT OF METHANE IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- 1 — USTS REPORTEDLY CLOSED IN PLACE:
  - 1 - 500-GALLON #2 OIL
  - 2 - 500-GALLON #2 OIL
  - 3 - 12,000-GALLON #2 OIL
  - 4 - 12,000-GALLON #2 OIL
  - 5 - 12,000-GALLON #2 OIL
- 8 — USTS REPORTEDLY REMOVED:
  - 6 - 1,000-GALLON DIESEL FUEL
  - 7 - 500-GALLON GASOLINE
  - 8 - #2 OIL, UNKNOWN CAPACITY

NOTES:

1. BASED ON PLANS PROVIDED BY MORRIS & RITCHIE ASSOCIATES, INC. (MRA), SAMPLE LOCATION PLANS PREPARED BY OTHERS, AND SITE OBSERVATIONS.
2. PROPERTY BOUNDARIES AND SITE FEATURES ARE APPROXIMATE.
3. REFER TO THE *SOIL VAPOR CHARACTERIZATION SUMMARY TABLE* (*TABLE 8*) FOR COMPLETE SOIL VAPOR DATA SUMMARY.
4. GTA'S SAMPLE LOCATIONS WERE SELECTED AND STAKED IN THE FIELD BY GTA USING A HANDHELD GPS UNIT. GTA'S SAMPLE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

0' 10' 20' 30' 60'

SCALE: 1"=30'

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FIGURE 4A

5601 EASTERN AVENUE

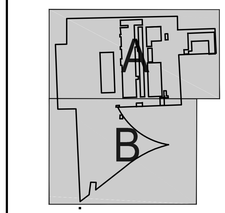
BALTIMORE CITY, MARYLAND

SOIL VAPOR SAMPLE LOCATION PLAN

PROJECT: 140080	DATE: OCTOBER 2015	SCALE: 1" = 30'	DESIGN BY: MDP	REVIEW BY: KPP	FIGURE: 8a

MATCHLINE (SEE SHEET 3A FOR CONTINUATION)

ESG-26
ESG-34
ESG-15
ESG-32
ESG-30A/30B
ESG-3
ESG-21
CARBON DISULFIDE 18,000 µg/m³
CHLOROFORM 160,000 µg/m³
METHYLENE CHLORIDE 17,000 µg/m³
TETRACHLOROETHENE 7,500,000 µg/m³
TRICHLOROETHENE 1,200,00 µg/m³
VINYL CHLORIDE 47,000 µg/m³
Asphalt Paving
ESG-20
BENZENE 110 µg/m³
CHLOROFORM 53 µg/m³
TETRACHLOROETHENE 15,000 µg/m³
TRICHLOROETHENE 3,100 µg/m³
EX. STORM MANHOLE=91.86
ESG-22
Asphalt Paving
ESG-19
7
GTA-SV-14
5 4 3
FORKLIFT SHOP
REFRACTORY SHED/
HAZARDOUS WASTE STORAGE
OIL PUMP
HOUSE
ESG-27
Grass
Grass
GTA-SV-11
ESG-4
ESG-28
Grass
Wooded
Grass
ESG-29
Wooded



SHEET KEY MAP

SCALE: 1" = 400'

LEGEND:

- APPROXIMATE SUBJECT PROPERTY BOUNDARY
- ESG-6 (ACROLEIN 5.3 µg/m³) — ERM SOIL VAPOR SAMPLE LOCATIONS PERFORMED BY OTHERS (ERM, 2006-2013) EXCEEDANCES OF THE RESIDENTIAL COMPARISON VALUES FOR TIER I SOIL VAPOR
- GTA-SV-1 — PROPOSED GTA SOIL VAPOR SAMPLE LOCATIONS (TO BE PERFORMED DURING RAP)
- APPROXIMATE EXTENT OF CRYSTAL HILL
- APPROXIMATE EXTENT OF VOC IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- APPROXIMATE EXTENT OF METHANE IMPACTS IDENTIFIED DURING PRIOR EVALUATIONS
- 1 — USTS REPORTEDLY CLOSED IN PLACE:
  - 1 - 500-GALLON #2 OIL
  - 2 - 500-GALLON #2 OIL
  - 3 - 12,000-GALLON #2 OIL
  - 4 - 12,000-GALLON #2 OIL
  - 5 - 12,000-GALLON #2 OIL
- 8 — USTS REPORTEDLY REMOVED:
  - 6 - 1,000-GALLON DIESEL FUEL
  - 7 - 500-GALLON GASOLINE
  - 8 - #2 OIL, UNKNOWN CAPACITY

NOTES:

1. BASED ON PLANS PROVIDED BY MORRIS & RITCHIE ASSOCIATES, INC. (MRA), SAMPLE LOCATION PLANS PREPARED BY OTHERS, AND SITE OBSERVATIONS.
2. PROPERTY BOUNDARIES AND SITE FEATURES ARE APPROXIMATE.
3. REFER TO THE *SOIL VAPOR CHARACTERIZATION SUMMARY TABLE* (*TABLE 8*) FOR COMPLETE SOIL VAPOR DATA SUMMARY.
4. GTA'S SAMPLE LOCATIONS WERE SELECTED AND STAKED IN THE FIELD BY GTA USING A HANDHELD GPS UNIT. GTA'S SAMPLE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.

0' 10' 20' 30' 60'
SCALE: 1"=30'
NORTH

GEO-TECHNOLOGY ASSOCIATES, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
14280 PARK CENTER DRIVE, SUITE A
LAUREL, MARYLAND 20707
(410) 792-9446 OR (301) 470-4470
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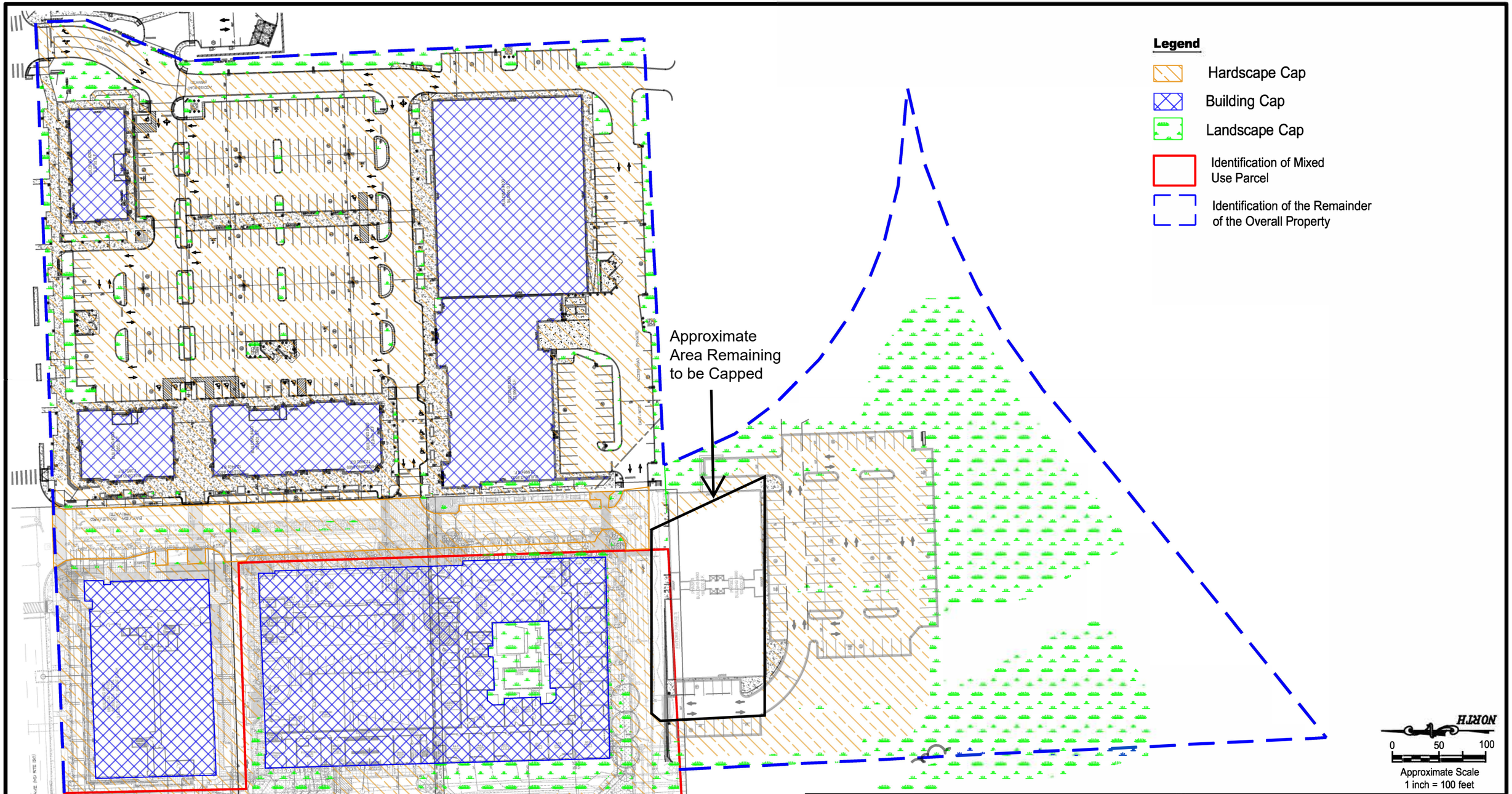
FIGURE 4B

5601 EASTERN AVENUE

BALTIMORE CITY, MARYLAND

SOIL VAPOR SAMPLE LOCATION PLAN

PROJECT: 140080	DATE: OCTOBER 2015	SCALE: 1" = 30'	DESIGN BY: MDP	REVIEW BY: KPP	FIGURE: 8b



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YARD 56 (Formerly PEMCO Corporation)
BALTIMORE CITY, MARYLAND

CAPPING DIAGRAM

PROJECT: 140080x5	DATE: February 2024	SCALE: 1" = 100'	DESIGN BY: BRS	REVIEW BY: KPP	FIGURE: 5

Attachment B

WHITEFORD, TAYLOR & PRESTON L.L.P.

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July 15, 2024

Via email only to kimak.christine@epa.gov

Christine Kimak, Project Manager
Corrective Action Program
U.S. Environmental Protection Agency, Mid-Atlantic Region
Mail Code 3LD11, 4 Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103

Re: Comments to Statement of Basis
Yard 56 (Formerly PEMCO Corporation)
Baltimore, Maryland
EPA ID No. MDD0003093499
Published Date: June 13, 2024

Dear Ms. Kimak:

I'm writing to follow up on our conversation of July 11th and to provide written comment to the above-referenced Statement of Basis ("SB") on behalf of my clients TRP-MCB 5601 Eastern LLC, MCB Y56 Retail LLC, MCB Y56 Road LLC, MCB Y56 Office LLC, MCB Y56 Office 2 LLC, MCB Y56 Mixed Use LLC, MCB Y56 Lot 27B LLC, and MCB 5801 Eastern LLC (collectively, "MCB"), the "inculpable" past and current owners of the above-referenced facility (the "Facility"). We appreciate the opportunity to provide our thoughts and to continue our cooperative effort with both the U.S. Environmental Protection Agency ("EPA") and the Maryland Department of the Environment ("MDE") to redevelop the Facility and return it to use in a manner that protects and benefits its neighbors and the entire surrounding community.

Please find enclosed with this letter a .pdf copy of the EPA's SB, with suggested edits shown that represent MCB's specific comments to the document. As you will see, the majority of comments are provided to address the following:

a.) how the Facility has been subdivided, how it is currently owned, and how it has been redeveloped by MCB under the supervision of the MDE and EPA;
b.) how this SB in intended to apply to the entire Facility and effectively supersedes the September 2020 Record of Decision and Response to Comments issued by EPA for Lots 27C and 28 at the Facility;
c.) clarifying how MCB's efforts already completed on each of the Lots across the Facility have been consistent with the Response Action Plan and the EPA's selected remedy, as presented in the SB; and
d.) reflect MCB's general agreement with the proposed remedy described in the SB and provides certain corrections to some technical matters.

Per our discussion on the 11th, we look forward to working with you to develop an appropriate and reasonable groundwater monitoring plan that satisfies EPA's policies, while recognizing that the use of groundwater in the area around the Facility is not permitted by the City and State.

On behalf of MCB, thank you for your continuing assistance with the project and please don't hesitate to contact our team should you have any questions or concerns.

Sincerely,

M. Trent Zivkovich

Enclosure: MCB Comments to Proposed Draft Statement of Basis Document, July 15, 2024

cc: Barbara Brocks, Maryland Department of the Environment
Jaime Lee, MCB Real Estate, LLC
Joshua Nieman, MCB Real Estate, LLC
Kevin Plocek, Geo-Technology Associates, LLC

13609971

UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION 3

STATEMENT OF BASIS

Yard 56 (Formerly PEMCO Corporation)
Baltimore, MD

EPA ID NO. MDD003093499

Prepared by

RCRA Corrective Action Section West
Land, Chemicals and Redevelopment Division

May 2024

Table of Contents

List of Acronyms

amsl	Above mean sea level
AR	Administrative Record
bgs	Below ground surface
CAO	Corrective Action Objective
EC	Environmental Covenant
EJ	Environmental Justice
EPA	Environmental Protection Agency
ERM	Environmental Resources Management
GTA	Geo-Technology Associates, Inc.
HHRA	Human Health Risk Assessment
HSWA	Hazardous and Solid Waste Amendments
IC	Institutional Control
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
O&M	Operations and Maintenance
PAH	Polycyclic Aromatic Hydrocarbon

PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
PEMCO	Porcelain Enamel Manufacturing Company
PID	Photoionization Detector
RAP	Response Action Plan
RCRA	Resource Conservation and Recovery Act
RSL	Regional Screening Level
SB	Statement of Basis
SSI	Supplemental Site Investigation
SVOC	Semi-Volatile Organic Compound
TCE	Trichloroethene
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for Yard 56 located at 5601 Eastern Avenue, Baltimore, Baltimore County, Maryland (Facility).

The EPA's proposed remedy in this SB consists of the implementation of engineering controls, monitored natural attenuation of groundwater, land and groundwater use restrictions implemented through enforceable Institutional Controls such as an order and/or an Environmental Covenant to control exposure to contaminated soil and groundwater, and long-term groundwater monitoring. This SB highlights key information relied upon by the EPA in proposing its remedy. Note that because it applies to the entire Facility, this SB effectively supersedes that certain Final Decision and Response to Comments, issued by the EPA in September 2020 for Lots 27C and 28 of the Facility.

The Facility is subject to the EPA's Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. §§ 6901 et seq. The Corrective Action Program requires that owners and/or operators of facilities subject to certain provisions of RCRA investigate and address releases of hazardous waste and hazardous constituents, usually in the form of soil or groundwater contamination, that have occurred at or from their property. Environmental Justice (EJ) and Climate Adaptation information were considered during the RCRA Corrective Action decision-making process; this Facility is not considered a concern for EJ or Climate Adaptation.

The EPA is providing a thirty (30) day public comment period on the EPA's proposed remedy described in this SB. The EPA will evaluate comments received after the public comment period has ended and may modify its proposed remedy based on such comments. If the final remedy is substantially unchanged from the one proposed, the EPA will issue a Final Decision and inform all persons who submitted written comments or requested notice of the EPA's final determination. If the final remedy is significantly different from the one proposed, the EPA will issue a public notice explaining the new remedy and will reopen the comment period. The EPA will respond in writing to all relevant comments received during the comment period.

Information on the Corrective Action program and the Government Performance and Results Act Environmental Indicator Determinations for the Facility can be found by navigating to https://www.epa.gov/hwcorrectiveactioncleanups/hazardous-waste-cleanup-yard-56-formerly-pemco-corporation-baltimore.

The EPA has compiled an Administrative Record (AR) containing all documents, including data and quality assurance information, upon which EPA's proposed remedy is based. See

Statement of Basis

Section 10, Public Participation, below, for information on how you may review the AR.

Section 2: Facility Background

The Facility comprises approximately ~~19.97~~20.02 acres of land located south of Eastern Avenue and east of South Umbra Street, in the eastern portion of the City of Baltimore, Maryland (**Figure 1**). The Facility is bordered by Eastern Avenue to the north, Interstate 95 to the south, commercial properties to the east, and residences to the west. In general, land uses in the vicinity of the Facility consist of residential and commercial development, a medical campus, interstate highway corridors, and open fields.

Historically, the Porcelain Enamel Manufacturing Corporation (PEMCO) began operating at the Facility in the early 20th Century. Prior to PEMCO's operation, the Facility property was vacant. PEMCO produced specialty glass (frit), ceramic, enamels, and inorganic pigments until operations ceased in September 2007. The PEMCO manufacturing plant was decommissioned in December 2007. The main manufacturing building housed smelting furnaces, where raw materials were heated until molten and then cooled and broken into small pieces (the frit). Weighing and mixing of raw materials occurred in a color and mixing building, and raw materials were received at the Facility via truck and rail car. Finished product was stored in an on-site warehouse building or at an off-site leased warehouse prior to shipment. A control laboratory monitored production quality, and a separate research laboratory provided technical assistance. Two railroad spurs historically served the Facility but have since been removed.

An on-site wastewater treatment plant operated at the Facility until 2002. This wastewater treatment plant, located southeast of the Color and Mixing building, treated Facility discharge prior to disposal to a settling pond located in the southeast portion of the Facility until the early 1960s. In the mid-1960s, the portion of the Facility containing the settling pond was sold to the Exxon Company for use as part of a large tank farm, at which time the Facility discharge was routed from the wastewater treatment plant to local stormwater systems. The treatment plant operated under National Pollutant Discharge Elimination System discharge permit 97-DP-0317 until April 1, 2002. After that date, the Facility discharge was routed through the treatment plant's settling basin and then to the municipal sanitary sewer system.

In addition to regulated materials used in the manufacturing and maintenance processes, the Facility historically generated waste in the form of off-specification product, recovered dust, and material settled from process discharge water and surface runoff. Until approximately 1979, off-specification product, smelter refractories, packaging materials, and general facility trash were placed in an approximately six-acre industrial landfill (known

as Crystal Hill) on the southern and western portions of the Facility. The landfill was capped with 6 to 8 feet of clay loam and closed in 1979.

The Facility was originally owned and operated by PEMCO Corporation. The PEMCO name ~~has been~~was retained throughout the Facility's ~~operation~~period of industrial operations. In 1955, the PEMCO plant was sold to Glidden-Durkee Corporation, which became a division of the SCM Corporation (formerly Smith-Corona Company) in 1967. In 1980, the PEMCO Facility was sold to Mobay Chemical Corporation. In 1992, Mobay Chemical Corporation sold the Facility to Miles Inc. In 1995, Miles Inc. sold the facility to Bayer Corporation and in October 1997, the Facility was transferred to the PEMCO Holding Corporation. The Facility ~~was~~ceased all industrial operations and was shut down in 2007.The Facility was then acquired by ~~current owner~~ TRP-MCB 5601 Eastern~~,~~ LLC (TRP-MCB), from PEMCO Holding Corporation in 2014~~.~~ with the intention of demolishing the former industrial structures and redeveloping the underlying real property.

The Maryland Department of the Environment (MDE) received an application from TRP-MCB 5601 Eastern LLC for its Voluntary Cleanup Program (VCP) on September 29, 2014. MDE accepted the Facility into the VCP on August 12, 2015. ~~The Facility has recently undergone redevelopment consistent with the remedy elements described in the MDE-approved~~TRP-MCB then completed a Response Action Plan (RAP) for the Facility, pursuant to the requirements of the MDE's VCP. The RAP detailed the remedy elements to address impacted soil, soil vapor, and groundwater contamination within the Facility boundaries in conjunction with the Facility redevelopment. ~~Portions of the Facility have been redeveloped into a~~Following a review and receipt of comments from both MDE and EPA and subsequent revisions, a RAP that contemplated the redevelopment of the Facility for residential ~~apartment building~~, retail ~~spaces~~, and ~~office spaces.~~ commercial uses was approved by MDE on May 5, 2016.[1]

~~In March 2018, TRP-MCB 5601 Eastern, LLC began demolition of existing buildings and construction activities at the Facility. Construction and capping activities (including placement of buildings, hardscaped areas, landscaped areas, and vapor intrusion controls in buildings) have been substantially completed.~~

An affiliate of TRP-MCB acquired an adjacent property (5801 Eastern Avenue, 0.62 acres) not historically part of the Facility and thus not subject to EPA RCRA oversight. On November 11, 2018, TRP-MCB acquired 5801 Eastern Avenue and that same day,

[1] While the EPA retains oversight authority and jurisdiction for Corrective Action under Section 3006 of RCRA, the entire Facility is also overseen by the MDE under its Voluntary Cleanup Program. As such, the Facility investigation and remedial actions described herein have been cooperatively overseen by both the EPA and the VCP. The MDE-approved RAP is considered by EPA to have satisfied the RCRA Corrective Action requirements for a Corrective Measures Study (CMS).

subdivided 5801 Eastern Avenue and the real property that historically comprised the Facility, creating five (5) new, separate real property Lots. Each of these Lots was subsequently transferred by TRP-MCB to five (5) separate affiliated entities, but not before each entity applied to and was granted "inculpable person" status by the MDE. Following the submission of applications by each of the new property owners, the MDE accepted each new Owner and its Lot into the VCP on April 3, 2019. After a subsequent Amendment to the Subdivision Plat was recorded on April 16, 2021, and subsequent amendments filed with the VCP to ensure continuity, the owners and each of the Lots that currently comprise the former Facility are as follows:

Lot	**Acreage**	**Property Owner**	**Existing/Planned Use**	**Current Redevelopment Status per RAP**
27	4.223	MCB Y56 Mixed Use LLC	Existing Residential apartments & commercial (retail)	Complete
27B	5.473	MCB Y56 Lot 27B LLC	Proposed Commercial	Not yet redeveloped
27C	1.053	MCB Y56 Road LLC	Existing Roadway	Complete
27D	1.091	MCB Y56 Office 2 LLC	Existing Commercial (offices & retail)	Complete
28	7.197	MCB Y56 Retail LLC	Existing Commercial (retail)	Complete
29/49/50	1.602*	MCB 5801 Eastern LLC	Existing Commercial (service station)	Complete

Note: 0.62 acres of this Lot was not historically part of the Facility and, as such, is not subject to RCRA Correction Action requirements. However, the entire Lot is enrolled in the MDE's Voluntary Cleanup Program.

Each of TRP-MCB, MCB Y56 Retail LLC, MCB Y56 Road LLC, MCB Y56 Office LLC, MCB Y56 Office 2 LLC, MCB Y56 Mixed Use LLC, MCB Y56 Lot 27B LLC, and MCB 5801 Eastern LLC, collectively the prior and current owners of the real property that constitutes the Facility since its acquisition by TRP-MCB in 2014, are collectively referred to herein as "MCB".

Since the approval of its RAP in 2016 and subsequent completion of all planning and permitting requirements, the Facility has largely been redeveloped by MCB in two separate phases, respectively known as "Phase I" and "Phase II." In March 2018, TRP-MCB began demolition of existing buildings and construction activities at the Facility. Phase I involved

the redevelopment of Lot 27C (the "Road" parcel), Lot 28 (the "Retail" parcel), and Lot 29/49/50 (5801 Eastern- the gas station parcel) and was completed in late 2020. MCB's redevelopment process completed for these Lots and the construction of all improvements was consistent with the remedy elements described in the MDE-approved RAP. The MDE issued a "Certificate of Completion" (COC) for Lots 27C and 28 and a "No Further Requirements Determination" (NFRD) for Lot 29/49/50 in December 2020.

Phase II of the Facility's redevelopment began in the fall of 2020 involving Lot 27 (the "Mixed Use" parcel) and Lot 27D (the "Medical Office Building" parcel), and was completed in May 2024 when the MDE issued a COC for both Lots. Likewise, MCB's redevelopment process completed for these Lots and the construction of all improvements was consistent with the remedy elements described in the MDE-approved RAP.

While the redevelopment of Lot 27B has yet to be completed, all grading and related groundwork on the real property has been completed. Any final use and design of any structure and improvements on the Lot shall be consistent with and comply with the requirements of the RAP and this SB.

With the pending completion of Phase I of the Facility's redevelopment in 2020, EPA developed and issued a Final Decision and Response to Comments in September 2020 solely for Lots 27C and 28 of the Facility (FDRTC). This SB provides a remedy that is consistent with the 2020 FDRTC but is intended to apply to the entire Facility, not simply Lots 27C and 28. As such, this SB (once finalized and issued as a Final Decision) is intended to supersede the 2020 FDRTC with regards to Lots 27C and 28.

Section 3: Conceptual Site Model

Topography

The topographic information on the 7.5-minute USGS Topographic Quadrangle Map (Baltimore East, MD) for the Facility vicinity indicates that the ground surface elevations on the Facility range from approximately 120 feet above mean sea level (amsl) on the northeastern portion of the Facility property, to approximately 60 feet amsl on the southernmost portion of the Facility property. A topographic knoll is located on the northeastern portion of the Facility, and the property slopes downward to the southwest, toward southerly flowing Gorsuch Creek. To facilitate redevelopment, cuts and fills were required to establish the mass grades, thereby altering the historic site topography. Surficial drainage in the site vicinity is collected by Gorsuch Creek and is directed toward the south and southwest.

Geology

The Facility is within the Coastal Plain Physiographic Province of the Lower Cretaceous Age. The Coastal Plain is characterized by undifferentiated and interlayered sedimentary deposits derived from eroded and transported rock formations to the north and west. Coastal Plain sediments were deposited in a marine and alluvial environment during periods of fluctuating sea levels. More specifically, the Facility is shown to be underlain by the Patapsco Formation and Artificial Fills. The southwestern portion of the Facility is mapped within Artificial Fills. These materials are described as a heterogeneous mixture of materials such as rock, unconsolidated sediment, slag, refuse, and dredge spoil. The central and northern portions of the Facility are mapped within the clay facies of the Patapsco Formation. The clay facies consist of buff, red-yellow, and brown mottled kaolinitic clays with variable amounts of quartz sand and silt, present as pods and interbeds throughout the clay. The northeastern portion of the Facility is underlain by the sand facies of the Patapsco Formation. These soils consist of well-sorted medium to fine grained quartz sand with locally abundant quartz gravel and clay clasts.

Hydrogeology

Hydrologically, the Coastal Plain is underlain by both unconfined and confined aquifers of unconsolidated sediments, which overlie consolidated bedrock and dip toward the southeast.

Groundwater storage and movement are functions of the primary porosity of the sediments. The groundwater flow direction in the Facility vicinity is assumed to mirror surficial topography. Accordingly, the groundwater flow direction is assumed to be generally toward the south/southwest. Prior evaluations indicated the shallow water table occurs more than 30 feet below ground surface.

Section 4: Summary of Environmental Investigations

A. Historical Investigations

The Facility was the subject of several historical investigations that were conducted between 1984 and 2004 by the EPA, MDE, Bayer AG, and Millennium Holdings, LLC. These investigations included the collection of two waste samples (one from an on-site dumpster), 41 soil samples, and three ground water samples. In addition, ten surface water samples and 11 sediment samples were collected from on and off-site sample locations. The samples were analyzed for a combination of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, metals, and cyanide. The results from these investigations are consistent with the investigations performed after 2006 as detailed below.

B. 2006/2007 Site Characterization

Statement of Basis

PEMCO ~~has~~ performed investigations of environmental conditions at the Facility jointly under EPA's Facility Lead Program and Maryland's ~~Voluntary Cleanup Program (~~VCP~~)~~. The work has been performed in accordance with the Site Characterization Work Plan dated December 6, 2006 (ERM 2006), which was prepared by Environmental Resources Management, Inc. (ERM) on behalf of PEMCO. EPA approved the Work Plan in January 2007. ERM has also undertaken several focused studies, approved by EPA and MDE, that augment the Work Plan. The results of the site characterization have been documented and submitted to EPA and MDE in a January 2011 report titled Site Characterization and Risk Assessment Report (ERM 2011). The Facility characterization included the following: installation of 92 soil borings, installation of 14 monitoring wells, collection of soil and groundwater samples, installation of 32 soil gas probes, five rounds of landfill gas field screening, and a methane extraction and recovery test.

Soil results were compared to the EPA Regional Screening Levels (RSLs). Arsenic was the most prevalent metal detected in soil at levels above its RSL. Arsenic concentrations ranged from non-detect to 74 mg/kg, the highest concentration found at sample location ESB-27. The only other metals that were detected in at least one soil sample at a concentration above its respective RSL were cobalt and iron. Cobalt was detected in ~~five~~six soil samples and concentrations ranged from 26 mg/kg to 95 mg/kg. These sample locations were below or next to the former manufacturing building at sample locations ESB-8, ESB-27, ESB-30, ESB-31, and ESB-56 or within the landfill at sample location ESB-45. Iron was detected at 100,000 mg/kg at sample location ESB-31, which is located adjacent to the southern side of the former main manufacturing building. Tetrachloroethene (PCE), trichloroethene (TCE), hexachloroethane, and polycyclic aromatic hydrocarbons (PAHs) exceeded their respective RSLs primarily in the vicinity of the landfill and south of the manufacturing complex.

The soil gas results indicated that a high concentration of VOCs, predominantly PCE and TCE, in soil gas is present in the landfill near monitoring wells EGW-10 and EGW-10D. Several of the soil gas sample points detected methane at concentrations ranging from 26.9 to 99.9 percent by volume.

In December 2006, PEMCO Holding Corporation installed nine shallow monitoring wells, designated EGW-1 through EGW-9, throughout the Facility. These wells were completed at depths between 25 to 35 feet below ground surface (bgs), and groundwater was not encountered in any of these wells. In September 2009, a deep monitoring well, EGW-10, was installed in the landfill to a depth of approximately 85 feet bgs, and groundwater was encountered at 67 feet bgs. In November and December 2009, a deeper monitoring well, EGW-10D, was installed next to EGW-10. EGW-10D was completed at a depth of approximately 131 feet bgs. In January 2010, two monitoring wells were installed. EGW-9D was installed next to EGW-9 and was completed at a depth of approximately 55 feet bgs. EGW-11 was installed at the toe of the landfill at a depth of approximately 30 feet bgs. In

February 2013, monitoring well EGW-12 was installed at the western Facility property boundary. EGW-12 was installed to a depth of 61 feet bgs and ground water was encountered at 49 feet bgs. The groundwater samples from EGW-10 contained PCE above its MCL of 5 ug/L (970 µg/L), TCE above its MCL of 5 ug/L (270 µg/L), cis-1,2-dichloroethene above its MCL of 70 ugl (570 µg/L), and carbon tetrachloride above its MCL of of 5 ug/L (21 µg/L). Chloroform was also detected at EGW-10 at concentrations of less than 10 µg/L but above its tap water RSL of 0.190 µg/L. Initial groundwater samples from EGW-10D, EGW-9D, and EGW-11 indicated that there were no exceedances of the MCLs for any VOCs. Carbon tetrachloride (7.7 µg/L) and PCE (12 µg/L) exceeded their MCLs (5 µg/L for both) at EGW-12. Monitoring well EGW-12 is located west of EGW-10 and concentrations were significantly lower in EGW-12 than EGW-10.

C. 2014 Supplemental Characterization

A supplemental site characterization was conducted in 2014 by Geo-Technology Associates, Inc. (GTA) on behalf of TRP-MCB ~~5601 Eastern, LLC~~. Activities included soil, groundwater, soil vapor, and methane sampling and field screening. Forty-five borings (GTA-SB-1 through GTA-SB-45) were performed for soil sampling and analysis, and 16 borings (GTA-SV-1 through GTA-SV-16) were advanced for the installation of soil vapor probes. Twenty-two borings were performed to evaluate the depth of fill material in the landfill or for installation of methane monitoring probes. Monitoring wells GTA-MW-1 through GTA-MW-5 were also installed as part of this site characterization.

VOCs did not exceed the EPA RSLs in any of the soil samples analyzed. For SVOCs, benzo(a)anthracene (RSL of 1.1 mg/kg), benzo(a)pyrene (RSL of 0.11 mg/kg), benzo(b)fluoranthene (RSL of 1.1 mg/kg), dibenz(a,h)anthracene (RSL of 0.11 mg/kg), and indeno(1,2,3-cd)pyrene (RSL of 1.1 mg/kg) exceeded their respective RSLs in both surface and subsurface soil. In surface soil, concentrations ranged from non-detect to 2.6 mg/kg for benzo(a)anthracene, non-detect to 2.2 mg/kg for benzo(a)pyrene, non-detect to 2.4 mg/kg for benzo(b)fluoranthene, non-detect to 0.44 mg/kg for dibenz(a,h)anthracene, and non-detect to 1.2 mg/kg for indeno(1,2,3-cd)pyrene. In subsurface soil, concentrations ranged from non-detect to 5.8 mg/kg for benzo(a)anthracene, non-detect to 5.0 mg/kg for benzo(a)pyrene, non-detect to 4.4 mg/kg for benzo(b)fluoranthene, non-detect to 1.1 mg/kg for dibenz(a,h)anthracene, and non-detect to 2.6 mg/kg for indeno(1,2,3-cd)pyrene. The following metals exceeded their respective RSLs in surface and subsurface soil:

- Antimony (RSL of 31 mg/kg): concentrations ranging from non-detect to 330 mg/kg
- Arsenic (RSL of 0.68 mg/kg): concentrations ranging from non-detect to 27 mg/kg
- Cadmium (RSL of 71 mg/kg): concentrations ranging from non-detect to 2,300 mg/kg
- Cobalt (RSL of 23 mg/kg): concentrations ranging from non-detect to 190 mg/kg
- Iron (RSL of 55,000 mg/kg): concentrations ranging from 6,700 to 110,000 mg/kg
- Lead (RSL of 400 mg/kg) with concentrations ranging from 3.2 to 22,000 mg/kg.

Statement of Basis

Groundwater samples were collected from newly installed monitoring wells GTA-MW-1 through GTA-MW- 5 as well as monitoring wells EGW-9D, EGW-10, and EGW-12. For SVOCs:

- Hexachloroethane exceeded the RSL of 0.33 µg/L in monitoring wells GTA-MW-3, GTA-MW-5, and EGW-10 with concentrations ranging from 11 to 670 µg/L (GTA-MW-5).
- Naphthalene exceeded the RSL of 0.17 µg/L in GTA-MW-5 (29 µg/L).
- Bis(2-ethylhexyl)phthalate exceeded the MCL of 6 µg/L in GTA-MW-4 (9.5 µg/L).

For VOCs:

- 1,1,2,2-tetrachloroethane exceeded the RSL of 0.076 µg/L in GTA-MW-5 (1.5 µg/L) and EGW-10 (1.4 µg/L).
- 1,1-Dichloroethene exceeded the MCL of 7 µg/L in GTA-MW-5 (14 µg/L) and EGW-10 (12 µg/L).
- Carbon tetrachloride exceeded the MCL of 5 µg/L in GTA-MW-2 through GTA-MW-5, EGW-10, and EGW-12 with concentrations ranging from ~~5.4~~10 to 290 µg/L.
- Chloroform exceeded the MCL of 80 µg/L in GTA-MW-2 (190 µg/L).
- PCE exceeded the MCL of 5 µg/L in GTA-MW-1 through GTA-MW-5, EGW-10, and EGW-12 with concentrations ranging from 14 to 28,000 µg/L (GTA-MW-5).
- TCE exceeded the MCL of 5 µg/L in GTA-MW-2, GTA-MW-3, GTA-MW-5, and EGW-10 with concentrations ranging from 5.7 to 3,400 µg/L (GTA-MW-5).
- Vinyl chloride exceeded the MCL of 2 µg/L in GTA-MW-5 (38 µg/L) and EGW-10 (4.7 µg/L).
- cis-1,2-Dichloroethene exceeded the MCL of 70 µg/L in GTA-MW-5 (12,000 µg/L) and EGW-10 (11,000 µg/L).
- trans-1,2-Dichloroethene exceeded the MCL of 100 µg/L in GTA-MW-5 (310 µg/L) and EGW-10 (290 µg/L).

For dissolved metals:

- Antimony exceeded the MCL of 6 µg/L in GTA-MW-5 (17 µg/L).
- Cobalt exceeded the RSL of 6 µg/L in GTA-MW-1 through GTA-MW-5 with concentrations ranging from 20 to 65 µg/L.
- Iron exceeded the RSL of 14,000 µg/L in GTA-MW-4 (15,000 µg/L) and GTA-MW-5 (18,000 µg/L).
- Lead exceeded the MCL of 15 µg/L in GTA-MW-5 (1,400 µg/L).
- Manganese exceeded the RSL of 430 µg/L in GTA-MW-1 (1,400 µg/L) and GTA-MW-2 (540 µg/L).
- Sodium exceeded the MCL of 1,000 µg/L in all monitoring wells with concentrations ranging from 21,000 to 670,000 µg/L.

Statement of Basis

- Total chromium exceeded the MCL of 100 µg/L in GTA-MW-4 (320 µg/L).

VOCs (carbon tetrachloride, chloroform, PCE, 1,1,2-trichloroethane, TCE, and vinyl chloride) were detected in soil vapor beneath the Facility above their MDE Tier 1 Values. Carbon tetrachloride (MDE Tier 1 of 94 µg/m^3) was found at concentrations ranging from non-detect to 7,600 µg/m^3. Chloroform (MDE Tier 1 of 24 µg/m^3) was found at concentrations ranging from non-detect to 2,300 µg/m^3. PCE (MDE Tier 1 of 840 µg/m^3) was found at concentrations ranging from non-detect to 380,000 µg/m^3. TCE (MDE Tier 1 of 42 µg/m^3) was found at concentrations ranging from non-detect to 23,000 µg/m^3. 1,1,2-Trichloroethane (MDE Tier 1 of 4.2 µg/m^3) was found at concentrations ranging from non-detect to ~~5.3~~6.5 µg/m^3. Methane was detected in the central portion of the former landfill known as Crystal Hill as high as 61.7% by volume.

D. Supplemental Investigations

As part of the RAP, several supplemental site investigations were performed at the Facility, as summarized below.

In July 2017, GTA performed a Supplemental Site Investigation (SSI) of the suspect polychlorinated biphenyl (PCB) underground storage tank (UST) area on behalf of TRP-MCB ~~5601 Eastern, LLC~~. This SSI was performed on the northeastern portion of the Facility, in the vicinity of the former control laboratory building. A geophysical evaluation in the asphalt and concrete-paved areas located in the vicinity of the control laboratory building did not identify anomalies that were considered consistent with an UST. Ten soil borings were installed and sample results did not identify PCBs.

The SSI also further evaluated lead and cadmium soil impacts previously identified at three locations (GTA-SB-11, GTA-SB-26, and GTA-SB-41) on the central and southeastern portions of the Facility. Lead was detected in each of the soil samples obtained but was below the RSL. Cadmium was not detected above the laboratory reporting limit.

In March 2018, TRP-MCB ~~5601 Eastern, LLC~~ installed six additional soil vapor points to further evaluate impacts surrounding soil vapor sampling location GTA-SV-5. PCE and TCE were detected above the screening levels, with PCE concentrations ranging from 3.4 to 3,600 µg/m^3 and TCE concentrations ranging from non-detect to 150 µg/m^3. Impacts are primarily located beneath the location of the former Warehouse and Main Manufacturing Building.

TRP-MCB ~~5601 Eastern, LLC~~ performed additional groundwater gauging, sampling, and analysis in March 2018, prior to building demolition and groundwater monitoring well abandonment which had been approved by the EPA and MDE. Five monitoring wells (GTA-MW-1 through GTA-MW-5) installed in 2014 and three wells, previously installed between 2006 and 2009 (EGW-9D, EGW-10, and EGW-12), were assessed and determined to be intact. The eight wells, except for EGW-9D, which was damaged and not sampled in 2018,

contained exceedances of the MCLs and/or Tapwater RSLs for VOCs, SVOCs, and TAL metals. 1,1-~~Dichloroethane~~Dichloroethene was detected above the MCL of 7 µg/L in GTA-MW-5 (10 µg/L) and EGW-10 (13 µg/L); carbon tetrachloride exceeded the MCL of 5 µg/L in each well except GTA-MW-1 with concentrations ranging from 5.4 to 410 µg/L; chloroform exceeded the MCL of 80 µg/L in GTA-MW-2 (380) ; PCE exceeded the MCL in GTA-MW-2 (720 µg/L), GTA-MW-3 (12 µg/L), GTA-MW-5 (2,800 µg/L), EGW-10 (5,100 µg/L), and EGW-12 (7.8 µg/L); TCE exceeded the MCL in GTA-MW-2 (170 µg/L), GTA-MW-5 (1,500 µg/L), and EGW-10 (3,200 µg/L); cis-1,2-dichloroethene exceeded the MCL of 70 µg/L in GTA-MW-5 (4,700 µg/L) and EGW-10 (13,000 µg/L); and trans-1,2-dichloroethene exceeded the MCL of 100 µg/L in GTA-MW-5 (180 µg/L) and EGW-10 (310 µg/L). Dissolved cobalt, sodium, and lead were also detected above the MCLs and/or Tapwater RSLs. The monitoring wells installed during the Phase I investigation in 2006 were either abandoned prior to 2014 or were installed too shallow and did not yield any groundwater.

In November 2019, ~~TRP-MCB 5601 Eastern, LLC conducted~~GTA initiated an additional methane evaluation on behalf of MCB. Twenty-one methane probes were installed within and surrounding the landfill. ~~Four~~Five rounds of methane screening were conducted between November 15, 2019 and ~~December 18, 2019, and on July 24, 2020~~October 8, 2021. The areas where methane was detected corresponded to areas within the landfill, with the areas of highest methane concentrations (GTA-CMM1 and GT-CMM2) corresponding to an area of high methane concentrations observed during prior evaluations.

E. Natural Attenuation

Natural attenuation entails a variety of physical, chemical and/or biological processes that reduce the mass, toxicity, mobility, volume, or concentration of constituents of concern. These processes are classified as degradation (biological or chemical), sorption (chemical) and dispersion, diffusion, dilution, and volatilization (physical).

Although temporal ground water sampling data is limited to multiple sampling events in fall 2009, winter 2010, February 2013, January 2015, and March ~~2013~~2018, it is reasonable to interpret the existing ground water data as indicative of attenuating conditions. The highest detections are of PCE,TCE, and cis-1,2-dichloroethene at the source area in wells GTA-MW-5 and EGW-10 . PCE, TCE, and cis-1,2-dichloroethene concentrations appear to be decreasing in monitoring well GTA-MW-5. In addition, detections of cis-1,2-dichloroethene at GTA-MW-1 through GTA-MW-5 and EGW-10 and detections of vinyl chloride at GTA-MW-5 and EGW-10, along with PCE and TCE, is indicative of natural biodegradation of PCE. cis-1,2-Dichloroethene and vinyl chloride are produced through the natural reductive dechlorination of PCE and TCE.

F. Interim Measures

Soil sampling conducted ~~by TRP-MCB 5601 Eastern, LLC~~ in 2018 by GTA on behalf of MCB identified PCB impacts in two areas: (1) an enclosed transformer room within the northeastern portion of the former warehouse building; and (2) a portion of a concrete floor slab, adjacent to a former transformer pad, in the west-central portion of the color mixing building. The transformers were removed sometime in the past, but it is not known when. In November 2018, PCB-contaminated soil and concrete were delineated in these areas and placed in roll-off dumpsters for off-site disposal. Approximately ~~161,000 kilograms or 178~~164 tons of material were disposed of at an off-site disposal facility.

In 2018, TRP-MCB identified and removed three 8,000-gallon diesel USTs (identified as UST Nos. 2-4), two 500-gallon heating oil USTs (identified as UST Nos. 5 and 6), and a 550-gallon heating oil UST (identified as UST No. 8) and associated petroleum-impacted soils were identified and removed. It should be noted that UST Nos. 1 and 7 had been previously removed from the Facility. A total of 437.04 tons of petroleum impacted soil was removed during all excavation activities described above.

During redevelopment activities throughout 2018 and ~~2019~~2023, petroleum-impacts were discovered in certain areas of the Facility. ~~In~~Between December 2018 and ~~January~~March 2019, two areas of petroleum-impacted soil were discovered in sewer and storm drain utility runs located on the southeastern ~~portion~~and central portions of the Facility. The petroleum-impacted ~~soil~~soils in the southeastern portion of the Facility was observed approximately 1-foot bgs and consisted of gray clays and silts that exhibited a petroleum odor. Elevated Photoionization Detector (PID) readings were not observed. Stained soil and petroleum odors were not observed below 5 feet bgs, where native clays were encountered. The approximate area of excavated petroleum-impacted soil that was removed was ~~about 50~~irregularly shaped, but approximately 51 feet long, ~~10~~18 feet wide, and 5 feet deep. The petroleum-impacted soil was staged on and covered with plastic adjacent to the excavation prior to future off-site disposal. No liquids were encountered in the excavation.

In ~~March 2018, an~~April 2019, a second area of petroleum-impacted soil was discovered in a water line utility run located on the ~~southeastern~~central portion of the Facility~~, contiguous to the impacts identified in December 2018 and in January 2019~~. The petroleum-impacted soil was observed approximately 1-foot bgs. ~~The soil observations and~~Observed PID readings ~~were generally consistent to the area of adjacent impacts~~ranged between 50 and 100 ppm. Stained soil and petroleum odors were not observed below 3 feet bgs, where native clays were encountered. The area of excavated petroleum-impacted soil that was removed measured approximately ~~40~~20 feet long, ~~4~~10 feet wide, and 3 feet deep. The petroleum-impacted soil was staged on and covered with plastic adjacent to the excavation prior to future off-site disposal. No liquids were encountered in the excavation.

In May and June 2019, a third area of petroleum-impacted materials were encountered during footing excavations. An approximately 75-foot section of petroleum-impacted soil was discovered in May 2019. In June 2019, two approximately 25-foot sections of petroleum-impacted soil were discovered north and south of the original 75-foot section. This material was found approximately 3 feet bgs and consisted of an approximately 1½-foot layer of stone, brick, and concrete mixed with soil (petroleum-impacted material). Clays were observed above and below this material, and the clays did not display indications of staining or unusual odors. The petroleum-impacted material exhibited petroleum odors, and PID readings were between 30-60 ppm. No liquids were observed in the excavation. Petroleum-impacted soils were not observed west of the excavation during prior utility installation activities, nor were they observed further east during the installation of interior column footings.

~~In 2018, TRP-MCB 5601 Eastern, LLC identified and removed three 8,000-gallon diesel USTs (identified as UST Nos. 2-4), two 500-gallon heating oil USTs (identified as UST Nos. 5 and 6), and a 550-gallon heating oil UST (identified as UST No. 8). It should be noted that UST Nos. 1 and 7 were previously removed from the Facility. A total of 343.7 tons of petroleum impacted soil was removed during all excavation activities described above.~~

In December 2023, a fourth area of petroleum-impacted soil was identified along the western property boundary, in a former parking area adjacently east of the Umbra Street Alley. The approximate area of excavated petroleum-impacted soil was 15-foot wide, by 450-foot long, and 1 foot deep. The petroleum-impacted soil was directly loaded for off-site disposal.

In addition, landfill debris that exhibited an unusual odor was encountered within an approximate 85-foot-long section of sewer utility installation, generally within the central portion of the landfill. This area generally corresponds to a VOC-impacted area identified during prior evaluations. The odoriferous materials were generally located beneath approximately two feet of clay material and consisted of a gray granular material with some clay mixed with paper and plastic debris. This material was encountered to a depth of approximately 11½ feet below existing grades, where more granular soil and clays mixed with construction debris were encountered. The utility trench generally measured 5 feet wide, with the upper portions sloped outward for safety. A total of 717.31 tons of VOC- and lead-impacted soil was removed during the excavation activities described above.

Footnotes for the tables are provided in **Table 1**. Soil borings locations are shown on **Figures 2A** and **2B** and results are provided in **Tables 2** through **4**. Monitoring well locations are shown on **Figures 3A** and **3B** and results are provided in **Tables 5** through **7**. Soil vapor sample locations are shown on **Figures 4A** and **4B** and results are provided in **Table 8**.

Section 5: Human Health Risk Assessment

A Human Health Risk Assessment (HHRA) was performed under the assumption the entire Facility would be redeveloped for non-residential use. The results of the HHRA indicate that there is no unacceptable risk to current or future adolescents or adult trespassers or visitors at any of the undeveloped areas of the Facility. Further, there was no unacceptable risk identified for current or future off-site residents or industrial workers. The HHRA identified a potential for unacceptable risk to the following human health receptors under current or future industrial use conditions of the Facility:

- Presuming future redevelopment of the Facility property, exposure of future building occupants to soil gas via vapor intrusion could result in unacceptable risk to human health.
- Exposure to impacted soils within the approximate extent of VOC impacts (identified on **Figure 2A**) could result in an elevated non-carcinogenic hazard and carcinogenic risk to the construction/utility worker if unprotected exposure were to occur.
- Exposure to soil vapors in a trench within the approximate extent of VOC impacts (identified on **Figure 2A**) could result in an elevated carcinogenic risk to the construction/utility worker.
- Groundwater beneath the Facility contains VOCs and metals at concentrations above the EPA tapwater RSLs and MCLs, which could pose an unacceptable risk to human health receptors at the Facility if used for potable or non-potable purposes. Currently, there are no groundwater supply wells on the Facility.
- Exposure to deep on-site groundwater for non-potable purposes could result in an elevated carcinogenic and noncarcinogenic risk for industrial workers.

The HHRA also concluded that if the Facility is to be redeveloped either as industrial or residential, controls would be required to eliminate the unacceptable risks identified above. The proposed remedy as described in the SB includes these controls. As discussed in the *Migration of Contaminated Groundwater Under Control Environmental Indicator* for the Facility, analytical results from EGW-12 indicate low levels of VOCs are present in groundwater. The concentrations of carbon tetrachloride (6.8 µg/L) and PCE (7.8 µg/L) detected in EGW-12 are significantly lower than at the center of the property (at EGW-10) and are likely attributable to mixing of waters beneath the landfill where flow from the west and east converge at a former stream trace. The risk to off-site receptors west of EGW-12 due to vapor intrusion has been assessed based on the prior ESG-30 and ESG-31 soil gas results and found to be negligible. ESG-30 and ESG-31 are located near EGW-31 and benzene in ESG-31 (696J µg/m^3) was the only constituent that exceeded the MDE Tier 1 value of 72 µg/m^3. VOCs were also non-detect at downgradient monitoring well EGW-9D, except for PCE at 1.1 ug/L, which is below the MCL of 5 ug/L. These data, along with the soil

gas results collected as part of the site characterization indicate that VOCs are not migrating towards the property boundary at levels of concern. With the exception of a single detection, methane has not been detected in any monitoring point located along the perimeter of the Facility.

Section 6: Corrective Action Objectives

The EPA's Corrective Action Objectives (CAOs) are as follows:

1. **Soil**

   The EPA has determined that ~~hazardous~~regulated constituents currently remain in Facility soils above acceptable risk levels protective of human health and the environment for residential use. Therefore, the EPA's proposed Corrective Action Objective for Facility soils is to control exposure to the hazardous constituents remaining in surface soils by requiring compliance with and maintenance of engineering controls and land use restrictions.

2. **Groundwater**

   The EPA expects final remedies to return usable groundwater to its maximum beneficial use, where practicable, within a timeframe that is reasonable. For projects where aquifers are either currently used for water supply or have the potential to be used for water supply, EPA will use the National Primary Drinking Water Standard MCLs promulgated pursuant to Section 42 U.S.C. §§ 300f et seq. of the Safe Drinking Water Act and codified at 40 C.F.R. Part 141. EPA's Corrective Action Objectives for Facility groundwater are 1) to restore the groundwater to drinking water standards, otherwise known as MCLs, or to the relevant RSL for tap water for contaminants that do not have an MCL and, 2) until such time as drinking water standards are restored, to control exposure to the hazardous constituents remaining in the groundwater by requiring the continued implementation of the groundwater monitoring program and compliance with and maintenance of groundwater use restrictions.

   Municipal water is available and supplied by the City of Baltimore throughout the entire area surrounding the Facility. There are no known users of groundwater in the surrounding area, and other that environmental monitoring wells, no wells installed on or in the area surrounding the Facility. State of Maryland Well Construction Regulations, codified at Code of Maryland Regulations 26.03.01.05, prohibit installation of individual water systems where adequate public systems are available. Moreover, Section 317.1 of Baltimore City's Building Code requires the connection of any building's water distribution system in which plumbing fixtures

are installed to a public water supply system unless otherwise authorized by the State.

3. **Soil Vapor**

The EPA's CAO for soil vapor at the Facility is to control human exposure to contaminated subsurface vapor in buildings/structures so that indoor air quality within any such buildings/structures is protective of human health for current and anticipated future uses.

Section 7: Proposed Remedy

The EPA's proposed remedy for all environmental media is as follows:

1. **Soil**

The EPA's proposed remedy for Facility soil is to install and maintain a cover system on the entire Facility (hardscaped or landscaped cap with marker fabric above the contaminated soil) that controls, minimizes, or eliminates post remedial action migration of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere, to the extent necessary to protect human health and the environment. The ~~remaining area of the Facility to be capped (**Figure 5**) includes a small portion undergoing redevelopment (the rest of the Facility has already been capped). The~~ cap shall be designed and constructed to prevent infiltration to mitigate potential cross-media migration (soil to groundwater) of COCs. The cap shall be functionally equivalent to the performance standards documented in 40 C.F.R. Section 265.310. A portion of the Facility (Lot 27B, as shown on Figure 5) has yet to be fully redeveloped and to be capped (Figure 5). All other portions of the Facility have already been capped consistent with the requirements of the RAP and this SB's proposed remedy.

A Containment Remedy Operations and Maintenance ~~(O&M)~~ Plan (CROMP) and Health and Safety Plan (HASP) shall be submitted for EPA and MDE review and approval and, at a minimum will include the following: the procedures to maintain the cap over the contaminated soil; a schedule for inspections to be performed as part of cap maintenance, no less frequent than once a year; and physical maintenance requirements of the capped areas to prevent degradation of the cap and unacceptable exposure to the underlying soil. The CROMP and HASP submitted by GTA on behalf of MCB for the Phase I and Phase II Lots and approved by MDE satisfies this requirement for those areas of the Facility.

2. Groundwater

The EPA's proposed remedy for Facility groundwater consists of monitored natural attenuation until MCLs or, if no MCLs exist, the RSLs for tap water are met.

Data show the plume is stable and levels of TCE and PCE are naturally attenuating. The highest concentrations are of PCE, TCE, and cis-1,2-dichloroethene at the source area in wells GTA-MW-5 and EGW-10 and concentrations appear to be stable or decreasing .Additionally, detections of cis-1,2-dichloroethene at GTA-MW-1 through GTA-MW-5 and EGW-10 and detections of vinyl chloride at GTA-MW-5 and EGW-10, along with PCE and TCE, is indicative of natural biodegradation of PCE. Cis-1,2-Dichloroethene and vinyl chloride are produced through the natural reductive dechlorination of PCE and TCE.

Monitoring wells shall be installed pursuant to an EPA-approved Work Plan and long-term groundwater monitoring shall be required. Additionally, ~~groundwater restrictions, which prohibit onsite use,~~prohibitions against the use of groundwater established as a requirement of each COC and NFRD issued by the MDE and recorded in land records for each of Lots 27, 27C, 27D, 28 and 29/49/50 shall remain in place to prevent exposure to contaminants while levels remain above MCLs or RSLs, as applicable. The source removal in the form of soil excavations discussed in Section 4 and the permanent cover system at the Facility that will reduce stormwater infiltration will aid in the further attenuation of contamination.

3. Soil Vapor

a. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.

b. The integrity of vapor intrusion control systems installed in existing buildings shall be maintained.

c. All vapor intrusion control systems shall be inspected, maintained, and repaired as needed.

d. Atmospheric pressure differentials and other factors such as soil permeability, moisture content, etc., may cause accumulation of methane beneath hardscaped paved areas, and shall be addressed by installation of vapor vents located at light pole locations within the parking lots.

e. MCB has designed and installed systems across the Facility that are consistent with the requirements of the RAP and this SB's proposed remedy for soil vapor.

4. Institutional Controls

The EPA's proposed remedy also includes the following land and groundwater use restrictions and notifications to protect human health and the integrity of the remedy:

a. Groundwater at the Facility shall not be used for any purpose other than the operation, maintenance, and monitoring activities currently being conducted at the Facility and activities required by the EPA and MDE, unless it is demonstrated to the EPA and MDE that such use will not pose a threat to human health or the environment or adversely affect or interfere with the final remedy, and the current Facility owner obtains prior written approval from the EPA and MDE for such use.

b. No new wells shall be installed on the Facility unless it is demonstrated to the EPA and MDE that such wells are necessary to implement the final remedy for the Facility, and the current owner obtains prior written approval from the EPA and MDE to install such wells.

c. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure to be constructed on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.

d. The integrity of vapor intrusion control systems installed in existing buildings shall be maintained.

e. All vapor intrusion control systems shall be inspected, maintained, and repaired as needed.

f. Compliance with the EPA and MDE-approved ~~O&M Plan~~CROMP. The ~~O&M Plan~~CROMP will require the current Facility owner to maintain the integrity of the vapor intrusion control systems and all caps and covers on the Facility by conducting regular periodic inspections (no less frequently than once per year), making timely repairs if needed, and maintaining a record of such inspection and maintenance. The ~~O&M Plan~~CROMP will also establish the documentation, reporting, and notification methods that will be used to

implement, monitor compliance, and ensure the ~~O&M Plan~~CROMP remains in place and effective.

g. All earthmoving activities on the Facility, including excavation, grading, and/or utility construction, shall be conducted in compliance with an EPA and MDE-approved O&M Plan to ensure that the activity will not pose a threat to human health and the environment or adversely affect or interfere with the covered areas.

h. On an annual basis and whenever requested by the EPA or MDE, the current Facility owner shall submit to MDE and the EPA a written certification stating whether the owner is maintaining and complying with all groundwater and land use restrictions.

i. The Facility shall not be used in a way that will adversely affect or interfere with the integrity and protectiveness of the final remedy.

The land and groundwater use restrictions necessary to prevent human exposure to contaminants at the Facility will be implemented through enforceable Institutional Controls (ICs) such as an order and/or an Environmental Covenant pursuant to the Maryland Uniform Environmental Covenants Act, §§ 1-80 I through 1-815 of the Environment Article, Annotated Code of Maryland to be recorded ~~with the deed~~in the land records of the Circuit Court for Baltimore City for the Facility property. If the EPA determines that additional monitoring activities, institutional controls, or other corrective actions are necessary to protect human health or the environment, the EPA has the authority to require and enforce such additional corrective actions through an enforceable mechanism which may include an order or Environmental Covenant, provided any necessary public participation requirements are met. If any individual with an interest in the Facility property believes that information shows that any use restrictions proposed and later selected by the EPA are no longer necessary to protect public health and the environment, the individual may submit such information to the EPA for consideration. The EPA can change any such restriction if it determines it is no longer necessary, after any required public comment period.

Section 8: Evaluation of Proposed Remedy

This section provides a description of the criteria the EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, the EPA evaluates three decision threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, the EPA then evaluates seven balancing criteria.

Threshold Criteria	Evaluation
1) Protect human health and the environment	The EPA's proposed remedy for the Facility protects human health and the environment by eliminating, reducing, or controlling unacceptable risk through the implementation and maintenance of environment use restrictions and engineering controls for contaminated soil and groundwater above acceptable residential use levels. <u>Soil</u> A cap installed throughout the entire Facility will protect human health and environmental exposure by preventing direct contact. <u>Groundwater</u> Human health and environmental exposure for groundwater will be protected through restrictions on potable groundwater use. The proposed use restrictions at the Facility will eliminate future unacceptable exposures to groundwater until MCLs or the RSLs for tap water, if no MCLs exist, are met. <u>Soil Vapor</u> All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as needed. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.
2) Achieve media cleanup objectives	The EPA's proposed remedy achieves media cleanup objectives based on assumptions regarding current and reasonably anticipated land and water resource use(s). The proposed remedy in this SB is based on an anticipated residential land use. <u>Soil</u> The permanent cover system at the Facility will prevent direct contact to impacted soils and will reduce stormwater

	infiltration to impacted groundwater and prevent receptor direct contact exposure. <u>Groundwater</u> Data show the plume is stable and concentrations of contaminants of concern are naturally attenuating. The proposed use restrictions at the Facility will eliminate future unacceptable exposures to and groundwater until MCLs or the RSLs for tap water, if no MCLs exist, are met. <u>Soil Vapor</u> All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as needed. The vapor intrusion control systems include alarms to indicate if indoor air concentrations exceed the cleanup criteria.
3) Remediating the Source of Releases	In all proposed remedies, EPA seeks to eliminate or further reduce releases of hazardous wastes and hazardous constituents that may pose a threat to human health and the environment, and this proposed remedy meets this objective. The sources of petroleum and PCB releases have been removed from Facility soils, thereby eliminating, to the extent practicable, further releases of hazardous constituents from on-site soils as well as groundwater. <u>Soil</u> The permanent cover system at the Facility will prevent direct contact to impacted soils and will reduce stormwater infiltration to impacted groundwater and prevent receptor direct contact exposure. <u>Groundwater</u> Data show the plume is stable and concentrations of contaminants of concern are naturally attenuating. The proposed use restrictions at the Facility will eliminate future unacceptable exposures to groundwater until MCLs or the RSLs for tap water, if no MCLs exist, are met. ~~Groundwater monitoring of the onsite wells will continue long-term.~~

	Soil Vapor All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as needed. A vapor intrusion control system, the design of which shall be approved in advance in writing by the EPA and MDE, shall be installed in each new structure on the Facility, unless it is demonstrated to EPA and MDE that vapor intrusion does not pose a threat to human health and EPA and MDE provide prior written approval that no vapor intrusion control system is needed.
Balancing Criteria	**Evaluation**
1) Long-term effectiveness	Soil The long-term effectiveness of the permanent cover system will be maintained by the implementation of institutional controls. Groundwater The long-term effectiveness of the remedy will be maintained by the implementation of land and groundwater use restrictions. The groundwater use restrictions will be maintained until MCLs or the RSLs for tap water, if no MCLs exist, are met. Soil Vapor All structures on the Facility have a vapor intrusion control system, which will be inspected, repaired, and maintained as needed.
2) Reduction of toxicity, mobility, or volume of the Hazardous Constituents	Soil The permanent cover system at the Facility will reduce the mobility of soil contaminants. The sources of petroleum and PCB releases have been removed from the soil at the Facility, thereby eliminating further releases of hazardous constituents from on-site soils. Groundwater Groundwater contaminant levels are anticipated to achieve MCLs through natural attenuation; groundwater use will be

	restricted to prevent exposure until MCLs or the RSLs for tap water, if no MCLs exist, are met. Soil Vapor All structures on the Facility are protected by a vapor intrusion control system.
3) Short-term effectiveness	Soil The permanent cover system at the Facility provides immediate risk reduction. Additionally, the EPA's proposed remedy takes into consideration future activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment, by requiring notification of these activities to the EPA and MDE. Groundwater The use restrictions would become effective immediately upon implementation through an enforceable mechanism such as an EC or order. Soil Vapor The vapor intrusion control systems provide immediate risk reduction.
4) Implementability	The proposed remedy has already been largely implemented, and the is readily implementable on the remaining portions of the Facility. The implementation of use restrictions will be through a mechanism that will inform future owners and occupants of these restrictions, such as an environmental covenant, permit, or order.
5) Cost	The costs associated with this proposed remedy are associated with the development and recording of the Environmental Covenant, permit, or order; cap and vapor intrusion control system maintenance and inspections; reporting; installation of new monitoring wells; and continued sampling and maintenance of the monitoring wells.
6) Community Acceptance	The EPA will evaluate community acceptance based on comments received during the public comment period and will address any comments in the Final Decision.

7) State/Support Agency Acceptance	State involvement has been solicited throughout the RCRA corrective action process and MDE concurred with the proposed remedy.

Overall, based on the evaluation criteria, the EPA has determined the proposed remedy meets the threshold criteria and provides the best balance of tradeoffs with respect to the evaluation criteria.

Section 9: Financial Assurance

~~PEMCO~~MCB will be required to demonstrate and maintain financial assurance for completion of the remedy pursuant to the standards contained in Federal regulations 40 C.F.R. § 264.145 and 40 CFR § 264.143.

Section 10: Public Participation

The public may participate in the remedy selection process by reviewing this SB and documents contained in the AR for the Facility and providing comments. The AR contains all information considered by EPA when proposing this remedy. The AR documents are available for public review at the location below:

U.S. EPA Region 3
4 Penn Center
1600 JFK Boulevard
Philadelphia, PA 19103
Contact: Christine Kimak (3LD11)
Phone: 215-814-2798
Email: kimak.christine@epa.gov

The public comment period will last thirty (30) calendar days from the date that the notice is published in a local newspaper. You may submit comments by mail or e-mail to Christine Kimak. EPA will hold a public meeting to discuss this proposed remedy upon request. If you would like to request a public meeting, please contact Christine Kimak.

The EPA will respond to all relevant comments received during the comment period. If the EPA determines that new information warrants a modification to the proposed remedy, the EPA will modify the proposed remedy or select an alternative based on the new information and/or public comments. In the Final Decision, the EPA will announce the selection of its final remedy, respond to all relevant comments received, and explain the rationale for any changes to the proposed remedy. All persons who comment on this proposed remedy will

receive a copy of the Final Decision. Others may obtain a copy by contacting Christine Kimak at the address listed above. The Final Decision will also be made publicly available on the EPA's website for the Facility.

Section 11: Signature

_____ Date: _____

Stacie Driscoll, Acting Director
Land, Chemicals, and Redevelopment Division
US EPA, Region 3

Section 12: Index to Administrative Record

ERM. 2006. Site Characterization Work Plan. December.

ERM. 2011. Site Characterization and Risk Assessment Report.

ERM. 2013 Final Site Characterization and Risk Assessment Report for 5601 Eastern Avenue, Baltimore, Maryland. May.

GTA. 2014. Report of Phase I Environmental Site Assessment: Former PEMCO Facility. April.

GTA. 2016. Response Action Plan. April.

GTA. 2018a. Site Update Response. April.

GTA. 2018b. Soil Vapor Screening and Assessment. April.

GTA. 2018c. Groundwater Evaluation Summary. May.

GTA. 2020. Response Action Plan Completion Report: Yard 56 – Road and Retails Parcels. November.

USEPA. 2020. Statement of Basis: PEMCO Inc. Lots 27C and 28. May.

Section 13: Attachments

Table 1 – Characterization Sampling Key
Table 2A – VOC Soil Characterization Summary, 2014-2017 Sampling
Table 2B – VOC Soil Characterization Summary, Pre-2014 Sampling
Table 3A – SVOC and PCB Soil Characterization Summary, 2014 Sampling
Table 3B – SVOC and PCB Soil Characterization Summary, Pre-2014 Sampling
Table 4 – Metals Soil Characterization Summary, 2014-2017 Sampling
Table 5 – SVOC Groundwater Characterization Summary
Table 6 – VOC Groundwater Characterization Summary
Table 7 – Metals Groundwater Characterization Summary
Table 8 – Soil Vapor Analysis Summary

Figure 1 – Site Location Map

Statement of Basis

Summary report: **Litera Compare for Word 11.3.1.3 Document comparison done on 7/15/2024 3:28:43 PM**	
Style name: WTP-Compare	
Intelligent Table Comparison: Active	
Original DMS: dm://WTP/13609972/1	
Modified DMS: dm://WTP/13609972/2	
Changes:	
Add	73
~~Delete~~	58
~~Move From~~	4
Move To	4
Table Insert	1
~~Table Delete~~	0
Table moves to	0
~~Table moves from~~	0
Embedded Graphics (Visio, ChemDraw, Images etc.)	0
Embedded Excel	0
Format changes	0
Total Changes:	140

Attachment C

Attachment C
Yard 56 (Formerly PEMCO Corporation)
RESPONSE TO COMMENTS

EPA received comments in the form of proposed text changes from TRP-MCB 5601 Eastern LLC, MCB Y56 Retail LLC, MCB Y56 Road LLC, MCB Y56 Office LLC, MCB Y56 Office 2 LLC, MCB Y56 Mixed Use LLC, MCB Y56 Lot 27B LLC, and MCB 5801 Eastern LLC (collectively, "MCB" or "the commentor"), the prior and current owners of the real property that constitutes the Facility, on the Statement of Basis for the Yard 56 (Formerly PEMCO Corporation) Facility in Baltimore, MD. A copy of MCB's proposed text changes is included as Attachment B. The EPA's summary of MCB's proposed changes and the EPA's responses are set forth below:

1. **Section 1: Introduction**: The commentor added the following to the second paragraph: "Note that because it applies to the entire Facility, this SB effectively supersedes that certain Final Decision and Response to Comments, issued by the EPA in September 2020 for Lots 27C and 28 of the Facility.

   EPA Response: The EPA agrees that the remedy in the 2024 Final Decision and Response to Comments (FDRTC) addresses the entire Facility. This 2024 FDRTC does not, however, supersede the 2020 FDRTC but incorporates the soils remedy for Lots 27C and 28. For clarification, the FDRTC states, "In September 2020, the EPA issued an FDRTC for soils at Lots 27C and 28 and this FDRTC applies to soil and groundwater for the entire Facility. This FDRTC incorporates the Final Remedy selected in the September 2020 FDRTC for Lots 27C and 28." This language has been incorporated into Section 1 of the Final Decision.

2. **Section 2: Facility Background**:
   a. In the first paragraph, the commentor changed the Facility size from 19.97 to 20.02 acres and added "interstate highway corridors" to the land uses in the vicinity of the property.

      EPA Response: The EPA agrees with this comment, as it accurately reflects the Facility size and land uses and has incorporated this language into Section 2 of the Final Decision.

   b. In the fifth paragraph, the commentor changed, "The PEMCO name has been retained throughout the Facility's operation" to "The PEMCO name was retained throughout the Facility's period of industrial operations." Also, the commentor changed the following sentence of this paragraph from, "The Facility was acquired by current owner TRP-MCB 5601 Eastern, LLC from PEMCO Holding Corporation in 2014" to "The Facility ceased all industrial operations and was shut down in 2007. The Facility was then acquired by TRP-MCB 5601 Eastern LLC (TRP-MCB), from PEMCO Holding Corporation in 2014." The Commentor also proposed to add the following to the end of that sentence: "…with the intention

of demolishing the former industrial structures and redeveloping the underlying real property."

EPA Response: The EPA agrees with the first two comments, which provide additional historical background on the Facility, and has incorporated language into Section 2 of the Final Decision. The EPA disagrees with the third comment as it speaks to TRP-MCB's intent.

c. The Commentor proposed to change the following sentence of the fifth paragraph from, "The Facility has recently undergone redevelopment consistent with the remedy elements described in the MDE-approved Response Action Plan (RAP)" to "TRP-MCB then completed a Response Action Plan (RAP) for the Facility, pursuant to the requirements of the MDE's VCP."

EPA Response: The EPA agrees with this comment and has incorporated this language into Section 2 of the Final Decision.

d. The Commentor proposed to change the following sentence of the fifth paragraph from, "Portions of the Facility have been redeveloped into a residential apartment building, retail spaces, and office spaces" to "Following a review and receipt of comments from both MDE and EPA and subsequent revisions, a RAP that contemplated the redevelopment of the Facility for residential, retail, and commercial uses was approved by MDE on May 5, 2016."

EPA Response: The EPA agrees with this comment and has incorporated this language into Section 2 of the Final Decision.

e. Commentor also added the following footnote to the proposed sentence change in Comment #2d above: "While the EPA retains oversight authority and jurisdiction for Corrective Action under Section 3006 of RCRA, the entire Facility is also overseen by the MDE under its Voluntary Cleanup Program. As such, the Facility investigation and remedial actions described herein have been cooperatively overseen by both the EPA and the VCP. The MDE-approved RAP is considered by EPA to have satisfied the RCRA Corrective Action requirements for a Corrective Measures Study (CMS)."

EPA Response: EPA agrees that Facility investigation and remedial actions have been cooperatively overseen by both the EPA and MDE under the VCP. EPA has incorporated the following language into the Final Decision: "The MDE-approved RAP is considered by the EPA to have satisfied the RCRA Corrective Action requirements for a Corrective Measures Study (CMS)."

f. The Commentor proposed to delete the last paragraph of the Section.

EPA Response: The EPA agrees with this comment as the information is reflected in language added to Section 2.

g. The Commentor added the following text to the end of Section 2:
"An affiliate of TRP-MCB acquired an adjacent property (5801 Eastern Avenue, 0.62 acres) not historically part of the Facility and thus not subject to EPA RCRA oversight. On November 11, 2018, TRP-MCB acquired 5801 Eastern Avenue and that same day, subdivided 5801 Eastern Avenue and the real property that historically comprised the Facility, creating five (5) new, separate real property Lots. Each of these Lots was subsequently transferred by TRP-MCB to five (5) separate affiliated entities, but not before each entity applied to and was granted 'inculpable person' status by the MDE. Following the submission of applications by each of the new property owners, the MDE accepted each new Owner and its Lot into the VCP on April 3, 2019. After a subsequent Amendment to the Subdivision Plat was recorded on April 16, 2021, and subsequent amendments filed with the VCP to ensure continuity, the owners and each of the Lots that currently comprise the former Facility are as follows:

Lot	Acreage	Property Owner	Existing/Planned Use	Current Redevelopment Status per RAP
27	4.223	MCB Y56 Mixed Use LLC	Existing Residential apartments & commercial (retail)	Complete
27B	5.473	MCB Y56 Lot 27B LLC	Proposed Commercial	Not yet redeveloped
27C	1.053	MCB Y56 Road LLC	Existing Roadway	Complete
27D	1.091	MCB Y56 Office 2 LLC	Existing Commercial (offices & retail)	Complete
28	7.197	MCB Y56 Retail LLC	Existing Commercial (retail)	Complete
29/49/50	1.602*	MCB 5801 Eastern LLC	Existing Commercial (service station)	Complete

Note: 0.62 acres of this Lot was not historically part of the Facility and, as such, is not subject to RCRA Correction Action requirements. However, the entire Lot is enrolled in the MDE's Voluntary Cleanup Program.

Each of TRP-MCB, MCB Y56 Retail LLC, MCB Y56 Road LLC, MCB Y56 Office LLC, MCB Y56 Office 2 LLC, MCB Y56 Mixed Use LLC, MCB Y56 Lot 27B LLC, and MCB 5801 Eastern LLC, collectively the prior and current owners of the real property that constitutes the Facility since its acquisition by TRP-MCB in 2014, are collectively referred to herein as 'MCB'. Since the approval of its RAP in 2016 and subsequent completion of all planning and permitting requirements, the Facility

has largely been redeveloped by MCB in two separate phases, respectively known as 'Phase I' and 'Phase II.' In March 2018, TRP-MCB began demolition of existing buildings and construction activities at the Facility. Phase I involved the redevelopment of Lot 27C (the 'Road' parcel), Lot 28 (the 'Retail' parcel), and Lot 29/49/50 (5801 Eastern- the gas station parcel) and was completed in late 2020. MCB's redevelopment process completed for these Lots and the construction of all improvements was consistent with the remedy elements described in the MDE-approved RAP. The MDE issued a 'Certificate of Completion' (COC) for Lots 27C and 28 and a 'No Further Requirements Determination' (NFRD) for Lot 29/49/50 in December 2020. Phase II of the Facility's redevelopment began in the fall of 2020 involving Lot 27 (the 'Mixed Use' parcel) and Lot 27D (the 'Medical Office Building' parcel), and was completed in May 2024 when the MDE issued a COC for both Lots. Likewise, MCB's redevelopment process completed for these Lots and the construction of all improvements was consistent with the remedy elements described in the MDE-approved RAP. While the redevelopment of Lot 27B has yet to be completed, all grading and related groundwork on the real property has been completed. Any final use and design of any structure and improvements on the Lot shall be consistent with and comply with the requirements of the RAP and this SB. With the pending completion of Phase I of the Facility's redevelopment in 2020, EPA developed and issued a Final Decision and Response to Comments in September 2020 solely for Lots 27C and 28 of the Facility (FDRTC). This SB provides a remedy that is consistent with the 2020 FDRTC but is intended to apply to the entire Facility, not simply Lots 27C and 28. As such, this SB (once finalized and issued as a Final Decision) is intended to supersede the 2020 FDRTC with regards to Lots 27C and 28."

EPA Response: The EPA agrees with some of these comments to clarify the lot-specific property ownership and use, with the exceptions noted below, and has incorporated language into Section 2 of the Final Decision.

i. *"An affiliate of TRP-MCB acquired an adjacent property (5801 Eastern Avenue, 0.62 acres) not historically part of the Facility and thus not subject to EPA RCRA oversight. On November 11, 2018, TRP-MCB acquired 5801 Eastern Avenue and that same day, subdivided 5801 Eastern Avenue and the real property that historically comprised the Facility, creating five (5) new, separate real property Lots. Each of these Lots was subsequently transferred by TRP-MCB to five (5) separate affiliated entities, but not before each entity applied to and was granted "inculpable person" status by the MDE. Following the submission of applications by each of the new property owners, the MDE accepted each new Owner and its Lot into the VCP on April 3, 2019. After a subsequent Amendment to the Subdivision Plat was recorded on April 16, 2021, and subsequent amendments filed with the VCP to ensure continuity…" This information was not relevant to the SB and did not affect the EPA's proposed remedy.*

ii. *"However, the entire Lot is enrolled in the MDE's Voluntary Cleanup Program." This information was not relevant to the SB and did not affect the EPA's proposed remedy.*

iii. *"Since the approval of its RAP in 2016 and subsequent completion of all planning and permitting requirements…" This information was not relevant to the SB and did not affect the EPA's proposed remedy.*

iv. *"MCB's redevelopment process completed for these Lots and the construction of all improvements was consistent with the remedy elements described in the MDE-approved RAP. The MDE issued a "Certificate of Completion" (COC) for Lots 27C and 28 and a "No Further Requirements Determination" (NFRD) for Lot 29/49/50 in December 2020." This information was not relevant to the SB and did not affect the EPA's proposed remedy.*

v. *"…when the MDE issued a COC for both Lots. Likewise, MCB's redevelopment process completed for these Lots and the construction of all improvements was consistent with the remedy elements described in the MDE-approved RAP." This information was not relevant to the SB and did not affect the EPA's proposed remedy.*

3. **Section 4: Summary of Environmental Investigations**:
   a. <u>B. 2006/2007 Site Characterization:</u>
      i. In the first paragraph, commentor removed the word "has" and deleted the definition of VCP.

         EPA Response: The EPA agrees with the deletion of the definition of VCP, but disagrees wih the proposed former language as the text is only editorial.

      ii. In the second paragraph, the commentor noted that cobalt was detected in six soil samples, not five.

         EPA Response: The EPA agrees with this comment as it accurately reflects the soil sampling and has incorporated language into Section 3 of the Final Decision.

   b. <u>C. 2014 Supplemental Characterization:</u>
      i. In the first paragraph, the commentor changed TRP-MCB 5601 Eastern, LLC to TRP-MCB.

         EPA Response: The EPA agrees with this comment, as it accurately reflects the abbreviated reference to TRP-MCB 5601 Eastern, LLC used in the SB and has incorporated language into Section 3 of the Final Decision.

ii. On page 9 of the SB, the summary of groundwater sampling for VOCs originally stated that "Carbon tetrachloride exceeded the MCL of 5 µg/L in GTA-MW-2 through GTA-MW-5, EGW-10, and EGW-12 with concentrations ranging from 5.4 to 290 µg/L." The commentor corrected the statement to indicate that concentrations ranged from 10 to 290 µg/L.

EPA Response: The EPA agrees with this comment and has incorporated language into Section 3 of the Final Decision.

iii. On page 10 of the SB, the summary of soil vapor detection for VOCs originally stated that "Trichloroethane (MDE Tier 1 of 4.2 µg/m^3) was found at concentrations ranging from non-detect to 5.3 µg/m^3." Commentor corrected the statement to indicate that concentrations ranged from non-detect to 6.5 mg/m^3.

EPA Response: The EPA agrees with this comment and has incorporated language into Section 3 of the Final Decision.

iv. On page 10 of the SB, the commentor changed the last sentence of the Section to read: "Methane was detected in the central portion of **the former landfill known as** Crystal Hill as high as 61.7% by volume."

EPA Response: The EPA agrees with this comment to further identify the former landfill portion of the Facility and has incorporated language into Section 3 of the Final Decision.

c. D. Supplemental Investigation:

i. Throughout the subsection, the commentor changed TRP-MCB 5601 Eastern, LLC to TRP-MCB.

EPA Response: The EPA agrees as it accurately reflects the abbreviated reference to TRP-MCB 5601 Eastern, LLC used in the SB and has incorporated language into Section 3 of the Final Decision.

ii. In the fifth paragraph, the commentor changed 1,1-Dichloroethane to 1,1-Dichloroethene.

EPA Response: The EPA agrees with this comment as it accurately reflects the sampling results and incorporated this language into Section 3 of the Final Decision.

iii. In the last paragraph, the commentor changed the first sentence from, "In November 2019, TRP-MCB 5601 Eastern, LLC conducted an additional

methane evaluation" to "In November 2019, GTA initiated an additional methane evaluation on behalf of MCB."

EPA Response: The EPA agrees with this comment as it identifies the environmental consultant that performed the evaluation on behalf of TRP-MCB 5601 Eastern, LLC and incorporated this language into Section 3 of the Final Decision.

iv. Also in the last paragraph, the commentor changed the following sentence from, "Four rounds of methane screening were conducted between November 15, 2019 and December 18, 2019, and on July 24, 2020" to "Five rounds of methane screening were conducted between November 15, 2019 and October 8, 2021."

EPA Response: The EPA agrees with this comment as it accurately reflects the timeline and rounds of methane screening and has incorporated this language into Section 3 of the Final Decision.

d. E. Natural Attenuation: In the second paragraph, the commentor corrected the date in the first sentence from March 2013 to March 2018.

EPA Response: The EPA agrees with this comment as it accurately reflects the date of the ground water sampling event and has incorporated this language into Section 3 of the Final Decision.

e. F. Interim Measures:
   i. The commentor changed the first sentence in the first paragraph from, "Soil sampling conducted by TRP-MCB 5601 Eastern, LLC…" to "Soil sampling conducted in 2018 by GTA on behalf of MCB…"

   EPA Response: The EPA agrees with this comment as it identifies the environmental consultant that performed the evaluation on behalf of TRP-MCB 5601 Eastern, LLC and has incorporated language into Section 3 of the Final Decision.

   ii. The commentor corrected the last sentence in the first paragraph to state 164 tons of material were disposed of instead of 161,000 kilograms or 178 tons of material.

   EPA Response: The EPA agrees with this comment as it accurately reflects the amount of material disposed and has incorporated language into Section 3 of the Final Decision.

iii. The commentor moved the following after the first paragraph: "In 2018, TRP-MCB identified and removed three 8,000-gallon diesel USTs (identified as UST Nos. 2-4), two 500-gallon heating oil USTs (identified as UST Nos. 5 and 6), and a 550-gallon heating oil UST (identified as UST No. 8) and associated petroleum-impacted soils were identified and removed. It should be noted that UST Nos. 1 and 7 had been previously removed from the Facility. A total of 437.04 tons of petroleum impacted soil was removed during all excavation activities described above." The Commentor also changed TRP-MCB 5601 Eastern, LLC to TRP-MCB, added "and associated petroleum-impacted soils were identified and removed", and corrected the volume of soil from 343.7 to 437.04 tons.

EPA Response: The EPA agrees to add these details describing the removal of USTs and related impacts and has incorporated this language into Section 3 of the Final Decision.

iv. In the original second paragraph, the commentor corrected dates of redevelopment activities as throughout 2018 and 2023 instead of 2019, corrected dates of discovery of two areas of petroleum-impacted soil as between December 2018 and March 2019 instead of January 2019, corrected the location of the discovery as the southeastern **and central portions** of the Facility, clarified that **soils in the southeastern portion of the Facility** was observed approximately 1-foot bgs and consisted of gray clays and silts that exhibited a petroleum odor, and corrected the area of excavation as follows: irregularly shaped, but approximately 51 feet long, 18 feet wide, and 5 feet deep.

EPA Response: The EPA agrees with these comments to clarify the details related to petroleum-impacted soils and has incorporated language into Section 3 of the Final Decision.

v. In the original third paragraph, the commentor corrected the date in the first sentence from March 2018 to April 2019, added that it was a second area of petroleum-impacted soil, corrected the area of the Facility where the discovery was made from southeastern to central, and deleted the statement that the area was contiguous to the impacts identified in December 2018 and in January 2019.

EPA Response: The EPA agrees with these comments to clarify the details related to petroleum-impacted soils and has incorporated language into Section 3 of the Final Decision.

vi. In the original third paragraph, commentor changed the following sentence from "The soil observations and PID readings were generally

consistent to the area of adjacent impacts" to "Observed PID readings ranged between 50 and 100 ppm."

EPA Response: The EPA agrees with this comment as it clarifies the PID readings and has incorporated language into Section 3 of the Final Decision.

vii. In the original fourth paragraph, the commentor added that in May and June 2019, **a third area of** petroleum-impacted materials were encountered.

EPA Response: The EPA agrees with this comment to clarify the areas of petroleum-impacted materials and has incorporated language into Section 3 of the Final Decision.

viii. The Commentor added the following text to the end of the Section: "In December 2023, a fourth area of petroleum-impacted soil was identified along the western property boundary, in a former parking area adjacently east of the Umbra Street Alley. The approximate area of excavated petroleum-impacted soil was 15-foot wide, by 450-foot long, and 1 foot deep. The petroleum-impacted soil was directly loaded for off-site disposal. In addition, landfill debris that exhibited an unusual odor was encountered within an approximate 85-foot-long section of sewer utility installation, generally within the central portion of the landfill. This area generally corresponds to a VOC-impacted area identified during prior evaluations. The odoriferous materials were generally located beneath approximately two feet of clay material and consisted of a gray granular material with some clay mixed with paper and plastic debris. This material was encountered to a depth of approximately 11½ feet below existing grades, where more granular soil and clays mixed with construction debris were encountered. The utility trench generally measured 5 feet wide, with the upper portions sloped outward for safety. A total of 717.31 tons of VOC- and lead-impacted soil was removed during the excavation activities described above."

EPA Response: The EPA agrees to add details related to the fourth area of petroleum-impacted soils and has incorporated language into Section 3 of the Final Decision.

4. **Section 5: Human Health Risk Assessment**: The commentor added the following sentence to the end of the Section: "With the exception of a single detection, methane has not been detected in any monitoring point located along the perimeter of the Facility."

EPA Response: The EPA agrees with this comment to clarify methane impacts at the Facility and has incorporated language into Section 4 of the Final Decision.

5. **Section 6: Corrective Action Objectives**:
    a. Under the Soil CAO, the commentor changed "hazardous" to "regulated".

        EPA Response: The EPA disagrees with the comment to change "hazardous" to "regulated" but agrees to change from hazardous constituents to contaminants.

    b. Under the Groundwater COA, commentor added the following text: "Municipal water is available and supplied by the City of Baltimore throughout the entire area surrounding the Facility. There are no known users of groundwater in the surrounding area, and other that environmental monitoring wells, no wells installed on or in the area surrounding the Facility. State of Maryland Well Construction Regulations, codified at Code of Maryland Regulations 26.03.01.05, prohibit installation of individual water systems where adequate public systems are available. Moreover, Section 317.1 of Baltimore City's Building Code requires the connection of any building's water distribution system in which plumbing fixtures are installed to a public water supply system unless otherwise authorized by the State."

        EPA Response: The EPA acknowledges this information but rejects incorporating it into the Final Decision as it was not relevant to the proposed remedy for groundwater and the requirement for the Facility to conduct long-term groundwater monitoring.

6. **Section 7: Proposed Remedy:**
    a. Throughout this Section, the commentor changed the acronym for the Containment Remedy Operations and Maintenance Plan from O&M Plan to CROMP.

        EPA Response: The EPA agrees with this comment as it more accurately reflects the name of the Plan and has incorporated language into Section 7 of the Final Decision.

    b. Soil
        i. The commentor deleted the following sentence: "The remaining area of the Facility to be capped (**Figure 5**) includes a small portion undergoing redevelopment (the rest of the Facility has already been capped)."

        EPA Response: The EPA disagrees with this comment because the original language accurately reflects that there remains a portion of the Facility that still needs to be capped. The EPA will note that the remaining area to be cap is identified as Lot 27B.

ii. The commentor added the following sentence to the end of the first paragraph: "A portion of the Facility (Lot 27B, as shown on Figure 5) has yet to be fully redeveloped and to be capped (Figure 5). All other portions of the Facility have already been capped consistent with the requirements of the RAP and this SB's proposed remedy."

EPA Response: The EPA disagrees with this comment because it has already been noted elsewhere in this paragraph.

iii. The commentor defined Health and Safety Plan as HASP.

EPA Response: The EPA disagrees with this comment because the acronym is not used anywhere else in the document.

iv. The commentor added **and** to the first sentence of the second paragraph.

EPA Response: The EPA agrees with this comment and has incorporated language into Section 7 of the Final Decision.

v. The commentor proposed the following addition to the end of the second paragraph: "The CROMP and HASP submitted by GTA on behalf of MCB for the Phase I and Phase II Lots and approved by MDE satisfies this requirement for those areas of the Facility."

EPA Response: The EPA disagrees with this comment. The EPA notes that these requirements have been met and approved by MDE, but it is not relevant to include in the Final Decision.

c. Groundwater: The commentor proposed to change the second sentence of the third paragraph from "Additionally, groundwater restrictions, which prohibit onsite use, shall remain in place to prevent exposure to contaminants while levels remain above MCLs or RSLs, as applicable" to "Additionally, prohibitions against the use of groundwater established as a requirement of each COC and NFRD issued by the MDE and recorded in land records for each of Lots 27, 27C, 27D, 28 and 29/49/50 shall remain in place to prevent exposure to contaminants while levels remain above MCLs or RSLs, as applicable."

EPA Response: The EPA agrees with this comment. After the Statement of Basis was published, MCB recorded an environmental covenant on the title to Lots 27, 27C, 27D, 28 and 29/49/50 *implementing groundwater use restrictions. The EPA has incorporated language into Section 7 of the Final Decision.*

d. Soil Vapor: The commentor proposed to add the following item e: "MCB has designed and installed systems across the Facility that are consistent with the requirements of the RAP and this SB's proposed remedy for soil vapor."

EPA Response: The EPA disagrees with this addition. The EPA notes that VI systems have been installed at onsite structures, but it is not relevant to include in the proposed remedy.

e. Institutional Controls
   i. The commentor added the phrase **to be constructed** for each new structure at the Facility.

      EPA Response: The EPA disagrees with this comment as it is redundant.

   ii. The commentor changed the Environmental Covenant to be recorded with **the land records of the Circuit Court for Baltimore City** from recording with **the deed**.

      EPA Response: The EPA agrees with this change and has incorporated language into Section 7 of the Final Decision.

f. Evaluation of Proposed Remedy:
   i. Under the third Threshold Criteria, the commentor deleted the statement that groundwater monitoring of the onsite wells will continue long term.

      EPA Response: The EPA disagrees with this comment. As stated in Section 7 and as required for the Proposed Remedy, monitoring wells shall be installed pursuant to an EPA-approved Work Plan and long-term groundwater monitoring shall be required.

   ii. Under the fourth Balancing Criteria, the commentor changed the first sentence from, "The proposed remedy is readily implementable" to "The proposed remedy has already been largely implemented, and the is readily implementable on the remaining portions of the Facility."

      EPA Response: The EPA disagrees with this comment. It has already been noted in this SB that the proposed remedy has been largely implemented. Furthermore, the threshold and balancing criteria are used to evaluate the proposed remedy; therefore, it is not appropriate to state here those activities that have already taken place at the Facility.

7. **Section 9 Financial Assurance**: The commentor changed the entity responsible for Financial Assurance from PEMCO to MCB.

EPA Response: The EPA agrees with this change as it accurately reflects the name of the party that will provide Financial Assurance and has incorporated language into Section 8 of the Final Decision.